DOCUMENT RESUME

ED 478 809 HE 036 039

AUTHOR	Scurry, Jamie E.
TITLE	Access and Achievement Building Block: Making the Case for All To Achieve.
PUB DATE	2003-03-00
NOTE	49p.; Prepared for the Futures Project: Policy for Higher Education in a Changing World, A. Alfred Taubman Center for Public Policy and American Institutions, Brown University.
AVAILABLE FROM	For full text: http://www.futuresproject.org/publications/AAnewformat1.pdf.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	EDRS Price MF01/PC02 Plus Postage.
DESCRIPTORS	*Access to Education; *College Graduates; Educational Attainment; Graduation Rate; *Higher Education; *Minority Groups; *School Holding Power

ABSTRACT

This essay explores the importance of college access and completion for all students. Two decades ago a ticket to the middle class could be purchased with a high school diploma, but now that ticket requires a college degree. When it comes to college attendance and graduation, statistics show that students of color and low-income students lag behind their white counterparts. Predictive studies suggest that students of color are the fastest growing segment of the population. Given this, it is incumbent on policymakers and academic leaders to figure out how to continue to improve access, while broadening their focus to include efforts aimed at increasing attainment rates for all students. This paper reviews the current demographic and educational environment and describes who is going to college and who graduates. It reviews some of the obstacles facing admission access and attendance and discusses the role of financial aid in promoting access and retention. The role of remediation in increasing retention and graduation is considered, and some policy suggestions are made for remediation programs. Four appendixes describe examples of programs for retention and remediation. (Contains 3 tables, 3 figures, and 199 endnotes.) (SLD)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 478 809

Access and Achievement Building Block:
Making the Case for All to Achieve

Jamie E. Scurry

The Futures Project: Policy for Higher Education in a Changing World
A. Alfred Taubman Center for Public Policy and American Institutions
Brown University

March 2003

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

J. Scurry

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- [x] This document has been reproduced as received from the person or organization originating it.
- [ ] Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

HE025034

BEST COPY AVAILABLE

Access and Achievement Building Block:
Making the Case for All to Achieve

What is the problem?
The New Economy, fueled by globalization and technology, now demands students who are increasingly more knowledgeable and skilled. Education provides students with the skills and knowledge needed to be productive, prosperous, and engaged citizens. Two decades ago a ticket to the middle class could be purchased with a high school diploma. Today, that ticket is more expensive—it requires a college degree. A college diploma serves as the primary signal of one's ability. But, as the wage differential between a worker with a high school diploma and one with a college degree continues to widen, who has access to acquiring this all important signal?

When it comes to college attendance and graduation, statistics show that students of color and low-income students lag behind their White counterparts. Predictive studies suggest that students of color are the fastest growing segment of the population. Given this, it is incumbent on policymakers and academic leaders to figure out how to continue to improve access, while broadening their focus to include efforts aimed at increasing attainment rates for *all* students.

What is the current demographic and educational environment?

- The levels of academic achievement as percentages of the adult U.S. population is as follows[i]:
  - 8th grade or less - 6.9%
  - Some high school, no diploma – 11.5%
  - High-school diploma - 29.5%
  - Some college, no degree - 20.5%
  - Associate degree - 16.1%
  - Bachelor's degree - 16.1%
  - Graduate or professional degree - 9.0%
- In 2001, 68% of the undergraduate enrollment was white, 13% was black, 12% Hispanic, 6% Asian or Pacific Islander, and 1% was American Indian or Alaska Native. 44% of undergraduates were male, and 56% were female.[ii]
- A strong correlation between income, education levels, and health has also been observed. Within specific income ranges, people with a higher levels of education self-reported being in better health than those with lower levels of education. Also, the percentage of the population over 25 in 1997 who reported being in excellent or very good health increased with increasing levels of education across all income ranges[iii]:
  - Less than high school – 38.7%
  - HS diploma or equivalent – 57.8%
  - Some college – 67.6%
  - Bachelor's degree or higher – 79.7%

- Currently, minimum requirements for entry into 4 year colleges are[iv]:
  - 4 years of Math, including Geometry, Algebra II and two years of AP classes.
  - 4 years of Science – 2 Physical Sciences and 2 biological sciences.
  - 4 years of English - including 2 AP.
  - 2 years (minimum) of a foreign language.

The following chart best illustrates persistence and attainment rates by high school curriculum and level of parent's education. What is striking here is that the "Core New Basics" curriculum (4 years of English, 3 years of math, 3 years of science and social studies), prepares too few for a successful post-secondary education. Even for first generation students, those who took a rigorous curriculum had attainment or retention rates similar to non-first generation students. However, the gap between those first generation students taking "Core New Basic" Curriculum and those taking a "Rigorous" program is quite large. In the first year, 9.9% and 1.0 respectively; in the second year, 12.9% compared to 4.4%. We must provide everyone with a "rigorous" curriculum[v].

Table 17.—Percentage distribution of 1995–96 beginning postsecondary students according to attainment level and year of postsecondary departure 3 years later (spring 1998), by academic rigor of secondary curriculum and first-generation status

	Total attained or still enrolled spring 1998	Attained by spring 1998	No degree			
			Still enrolled	Left without return in 1997–98	Left without return in 1996–97	Left without return in 1995–96
Total	81.7	4.0	77.7	4.1	7.2	7.0
Overall rigor						
Core New Basics or below	78.6	3.6	75.0	4.9	9.4	7.2
Beyond New Basics I	85.1	3.7	81.4	4.5	5.8	4.6
Beyond New Basics II	86.4	2.5	83.9	4.4	5.4	3.9
Rigorous	95.0	2.4	92.6	1.4	2.4	1.2
			First-generation			
Total	73.1	5.2	67.9	4.9	11.6	10.3
Overall rigor						
Core New Basics or below	70.0	5.5	64.5	7.1	12.9	9.9
Beyond New Basics I	84.9	5.0	79.9	2.4	8.1	4.6
Beyond New Basics II	86.3	3.9	82.4	5.4	6.0	2.4
Rigorous	92.9	5.4	87.5	1.7	4.4	1.0
			Parent had bachelor's or advanced degree			
Total	88.3	2.8	85.5	3.6	4.2	3.9
Overall rigor						
Core New Basics or below	87.6	2.2	85.4	3.3	6.2	2.9
Beyond New Basics I	86.7	3.5	83.2	5.0	3.0	5.4
Beyond New Basics II	85.8	0.9	84.9	4.5	4.6	5.1
Rigorous	96.1	1.7	94.4	1.4	0.9	1.7
			Parent had some college			
Total	76.6	5.6	71.0	4.6	10.0	8.8
Overall rigor						
Core New Basics or below	70.3	2.8	67.5	5.9	12.2	11.6
Beyond New Basics I	82.2	3.0	79.2	5.2	9.9	2.7
Beyond New Basics II	84.4	6.9	77.5	3.4	8.5	3.6
Rigorous	89.5	2.6	86.9	1.6	8.9	0.0

NOTE: Details may not sum to 100 due to rounding. Students in private, for-profit 4-year institutions are excluded from this analysis because the sample size was too small (less than 1 percent). Core New Basics curriculum includes 4 years of English, 3 years of mathematics, 3 years of science and social studies. Beyond New Basics I includes core New Basics and at least two of three science courses (biology, chemistry, or physics), algebra I and geometry, plus 1 year of foreign language. Beyond New Basics II includes core New Basics, advanced science (biology, chemistry, and physics) and advanced math (including algebra I, geometry, algebra II), plus 2 years of foreign language. Rigorous includes core New Basics, advanced science (biology, chemistry, and physics), 4 years of math (including algebra I, geometry, algebra II, precalculus), plus 3 years of foreign language and one honors/Advanced Placement course or Advanced Placement test score. Attained by spring 1998 refers to attainment at any 4-year institution and not only attainment at initial institution attended.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995–96 Beginning Postsecondary Students Longitudinal Study, First Follow-up (BPS:96/98).

- The correlation between income and college attendance is extremely significant: While 85% of high-school graduates from families earning more than $75,000 go to college, only 53% of graduates from families earning less than $25,000 do so.[vi]

- The proportion of college students 25 and older increased by 16% between 1970 and 1995.[vii] From 1990-1996 growth in the number of older students enrolling in higher education outpaced the growth of younger students. The enrollment of students aged 25 and over rose by 6%, compared to 2% for students under 25.[viii]
- Considering the current environment, many low-income, first-generation, and students or color struggle to attend and remain at many colleges and universities. The University of Wisconsin System's Design 2008, a comprehensive, outreach and retention program intended to best serve the entire Wisconsin population. For more information on this outstanding program, please see Appendix A.

Why should people get a college education?

- The demand for high-skilled workers is growing rapidly, and the wage differential between those receiving a high school diploma and an associates or bachelor's degree is also very high: The median household income in 1999 for a high school graduate was $42,995, for an associate degree it was $56,602, and for someone with a bachelor's degree it was $76,059.[ix]
- 70% of jobs that are growing require some post-secondary education.[x]
- Between 1973 and 1999, the median family income for a high school graduate decreased by 13.1%, while for someone with 4 years of college it increased by 9.9%.[xi]
- The median household income of many minorities is still far behind that of whites. In 2000, among African-American households median income was $30,439, more than $15,000 below median household income among non-Hispanic whites (which was $45,904), but nearly $1,600 above the 1999 level for African-Americans, a significant gain for a single year. Similarly, among Hispanics median household income rose to $33,447, about $1,700 above the 1999 level, but still far below that of non-Hispanic whites.[xii] Providing minorities with greater access to higher education would help to decrease this disparity.
- According to a study done by the Commission on National Investment in Higher Education, "the single most important factor in determining level of income is level of education." This can be seen by comparing levels of education to changes in income. The wages of men with a college education kept pace with inflation from 1976-1995, while the wages of men with some college dropped 14%, only a high school education dropped 18%, and high school drop-outs decreased by 25%.[xiii]
- According to a 2002 Rand study, "…[T]he highest paid workers will hold their own to 2015. Those in the 50th percentile--workers right in the middle of the distribution—have lost about 14 percent in real wages over the 20 years; by 2015, they will be earning about 25 percent less than they earned in 1976. But the most striking consequence of current trends shows up in the figures for workers in the bottom 10 percent. If current trends continue, these workers will be earning little more than half of what they earned in 1976."[xiv]

- Besides the personal advantages of getting a better education, there are advantages to society as well. These advantages include increased community service activity and greater political participation. Many colleges and universities have used student interest in service to strengthen their institutional commitment to working closely with the surrounding communities. Since its founding in 1985, membership in Campus Compact, a national association of college presidents working to promote civic participation and community service on college campuses, has grown to include 650 institutions. (I think we should also include stats about crime rates)
- Record numbers of freshmen were volunteering in 1998: 74.2% volunteered during their last year in high school, and 20.6% volunteer at least 3 hours per week.[xv]
- The Panetta Institute found that 73% of college students had recently done volunteer work, with 41% having volunteered on more than ten occasions.[xvi] Half of the students surveyed had refused to buy a product or service because they had issues with a company's policies.[xvii]
- Also, college education results in greater political participation. According to the Committee for the Study of the American Electorate, in the 1996 election[xviii]:
    - 49% of 18-24 year olds with 4 years of college voted
    - 39% of 18-24 year olds with 1-3 years of college voted
    - 22% of high school graduates aged 18-24 years old voted

Who is going to college, and who is graduating?

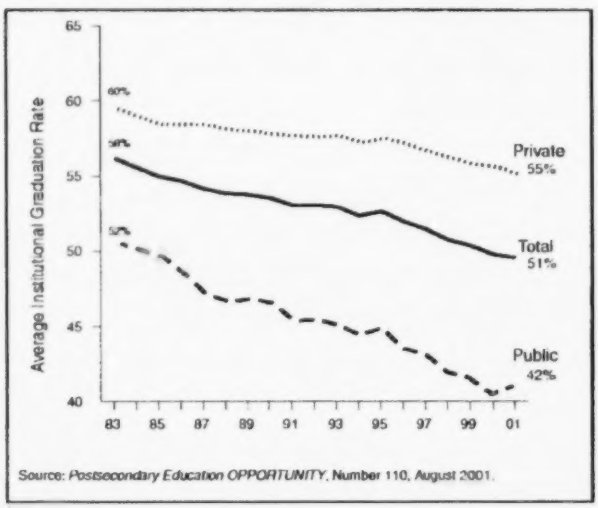
- In 2001, 68% of the undergraduate enrollment was white, 13% was black, 12% Hispanic, 6% Asian or Pacific Islander, and 1% was American Indian or Alaska Native. 44% of undergraduates were male, and 56% were female.[xix]
- In many states, the percentage of black students attending flagship state universities is much less than the percentage of all black college students in the state. For example, at the University of Georgia, in 1993 5.8% of its students were black, compared to 19.1% for the rest of the students enrolled in Georgia public colleges. This suggests that more black students are attending less rigorous and prestigious four-year schools and community colleges.[xx]
- Only 6.1% of lowest-quartile (socio-economic status, or SES) 1990 High School graduates entering post-secondary education had received a Bachelor's degree by 1995, compared to 41.1% of students in the highest quartile SES.
- For black students in this same cohort, the rate for completion of a Bachelor's degree was 16.9%, 17.8% of Hispanic students, and 27.3% of all white students.[xxi]
- College completion rates for persons 25 years and older for the year 2000 are as follows[xxii]:
    - All races – 25.6%
    - White – 26.1%
    - African American – 16.5%

- Hispanic – 10.6%

- The correlation between income and college attendance is extremely significant: While 85% of high-school graduates from families earning more than $75,000 go to college, only 53% of graduates from families earning less than $25,000 do so.[xxiii]

The following graph illustrates the general downward trend in graduation rates over the past 8 years[xxiv]:

Figure 5: Average 5-Year Institutional Graduation Rates at Public and Private 4-Year Institutions, 1983 to 2001



This graph was taken from page 12 of Paul E. Barton's report "The Closing of the Education Frontier?" published by the Educational Testing Service in September 2002.

How is the population changing?

- According to the National Center for Education Statistics, in 2015 Hispanics will make up 48.8% of the growth in the traditional college age population. Asian/Pacific Islanders will account for 16.2%, Blacks 16.0%, Native Americans 0.8%, and whites 18.2%.[xxv]
- In 1989-90 minority students represented about one-quarter of all undergrads, in 1999-2000 they represented nearly a third.[xxvi]
- Percentage of students working full time rose 7 points, while the percentage of part-workers fell 9 points. [xxvii]
- The proportion of college students 25 and older increased by 16% between 1970 and 1995.[xxviii] From 1990-1996 growth in the number of older students enrolling in higher education outpaced the growth of younger students. The enrollment of students aged 25 and over rose by 6%, compared to 2% for students under 25.[xxix]

Achieving Access: Preparation and Outreach

Before focusing on how to keep students in college, obstacles facing admission and attendance must be examined. Statistics show that family income and parent's education are indicators for whether students enroll in higher education. Other, more discrete institutional structures, such as tracking and financial obstacles, also result in lower access for certain students. However, many high schools and colleges have been collaborating to develop programs specifically designed to help students overcome these obstacles. These programs often include help with applications and understanding financial aid as well as improving student's academics while still in high school.

What are the access obstacles?

- Between 1970 and 2000, the high school graduation rates for the bottom income quartile remained consistently below 70%, while the rates for the top income quartile were between 90 and 100%.[xxx]
- Many studies have shown that there is often a gap between the percentage of students planning on secondary education and those who actually enroll. The two biggest factors affecting this are family income and parent's education. Of all students planning on attending post-secondary education immediately after high school graduation in 1992, 83.0% of students from low-income families had enrolled by 1994, compared to 96.2% from high income families. 78.1% of students whose parents were high school graduates or less had enrolled by 1994, compared to 88.1% of students whose parents had had some college, and 95.9% for college graduate parents.[xxxi]
- While 97% of all 1992 graduating seniors planned to continue their education, only 75% of all seniors had enrolled by 1994.[xxxii]
- There is also evidence of clear gaps in achievement in upper-level classes at high school, especially along racial lines. For example, 306 Black students (2.0% of total test-takers) took a total of 535 AP tests in Pennsylvania in 1999, scored a 3 or higher on 205 tests (38.3%). A three is the lowest score to qualify for credit at most colleges. On the other hand, white students accounted for 82.5% of all tests taken, and had a pass rate (3 or higher) of 65.6%.[xxxiii]
- The types of academic courses that students take in high school also have proven to be a crucial factor in keeping students on the path to college. For example, students who take a rigorous high school mathematics curriculum are much more likely to enroll in college than those who do not. In fact, of those students whose parents' education did not extend beyond high school:
    - 64% of students who took math beyond Algebra II enrolled in a four-year institution.
    - 34% of students who stopped at Algebra II enrolled in a four-year institution.[xxxiv]

  The breakdown of students by race taking advanced-level math courses is as follows:

- 64.6% of white high school graduates took Algebra II, as did 55.6% of black students, 48.3% of Hispanic, 70.1% of Asian/Pacific Islander, and 46.6% of American Indian/Alaskan Native.[xxxv]
- The discrepancies by race only become more significant as the level of math increases: 12.1% of white graduates took Calculus, while only 6.6% of black students, 6.2% of Hispanic students, and 6.2% of American Indian/Alaskan Native students did. On the other hand, 18.4% of Asian/Pacific Islander high school graduates took Calculus.[xxxvi]

How is financial aid a barrier to access?

"Throughout their academic lives, students are taught that in order to a have money in the future they have to get a college education. Today they are being confronted with the fact that in order to get a college education they need to have money."[xxxvii]

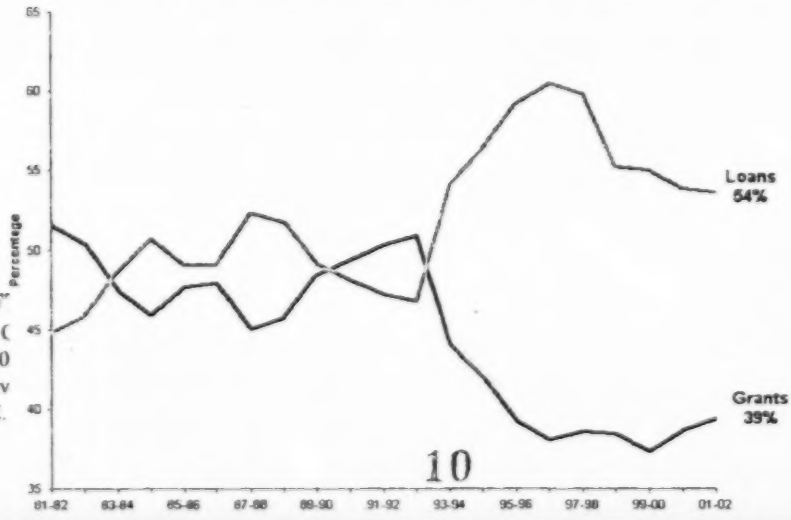
At precisely the time when higher education is becoming more important than ever for full participation in society, tuition is skyrocketing[xxxviii] and many state aid programs are shifting their focus to non-need based aid. This combination will likely result in fewer opportunities for low-income students. If tuition continues to increase at the current rates, by 2015 half of those students who want to pursue higher education will be shut out because they can no longer afford it. On the other hand, if tuition increases at the rate of inflation, by 2015 US colleges and universities will fall $38 billion short of what is needed to educate the student population.[xxxix]

These rising costs of higher education fall unevenly on the backs of low, middle, and upper-income families. On average, poor families spent 25% of their annual income on tuition at four-year public colleges in 2000, as compared to the 7% that middle income families spent, and the 2% that upper-income families spent. The statistics for both low- and middle-income families has doubled since 1980, while it has stayed about the same for upper-income.[xl]

What is the current condition of financial aid?

- In 1991-1992, 50% of student aid was in the form of grants, 47% in the form of loans, and 2% in work-study aid. By 2001-2002, the amount of grant money had decreased to 42% of aid, and loans had increased to 57%.[xli] The

Exhibit 4. *Grants vs. Loans, Percent Share of Total Aid, 1981-1982 to 2001-2002*



percentage changes for Federal Aid only can be evidenced by the following graph[xlii]:

This graph was taken from page 12 of the report "Trends in Student Aid," published by The College Board in 2002.

- In 1997-98, the portion of state aid dedicated to undergraduate need-based programs fell 5.5%, increasing non-need based aid by that same amount.[xliii]
- While the number of need grants grew the fastest from AY 1989/90 to AY 1995/96, the size of non-need based grants grew the fastest in the same period.[xliv]
- 33 states offer some form of non-need based aid.[xlv]
- Over the past 20 years, the affordability gap has increased in many ways. For example, the share of family income required to pay college costs has increased for all but the wealthiest, and has gone up the most for those with low incomes.[xlvi]
- The Carnegie Commission reports that tuition costs at public institutions tuition have risen primarily in response to decreases in state spending on higher education, while tuition increases at private institutions are largely due to increased expenditures on merit scholarships.[xlvii]
- A $1000 drop in tuition increases college attendance by 4 percentage points, and by 5.2 percentage points for low-income youth.[xlviii]
- The percentage of educational expenditures supported by family contributions has increased in the last few decades, while the amount funded through taxes has decreased. In 1970, 30% of college funds came from families, and 60% from taxpayer money, while in 1995 39% came from families and only 49% came from taxpayers.[xlix]
- Currently, families of low-income, college-qualified high school graduates face an annual unmet need of $3,800 that is not covered by the current financial aid system. This barrier effectively prevents 48% of those low-income students from attending a four-year college. As a result, more than 400,000 qualified high-school graduates, with the credentials to attend college, will be unable to attend a four-year college. 170,000 will attend no college at all.[l]
- Issues of debt affect students of different racial groups in unequal ways: According to a study by Nellie May, 69% of African Americans who enrolled in college and dropped out did so because of their high student loan debt. In comparison, only 43% of white students who dropped out cited that as a reason.[li]
- Financial aid is not enough to cover the total costs of education for many students: 50.9% of all full-time college students in 2001 were also employed, as were 84.5% of all part-time college students.[lii]

- Thomas Kane, in his book *The Price of Admission: Rethinking How Americans Pay for College*, argues that the lack of information about financial aid and the complexity of the form itself constitute two significant barriers to access to financial aid. He says that low-income students are less likely to apply because, while they are aware of the tuition levels at state and private universities, they "may be less able to anticipate how aid they could receive or how to clear all the bureaucratic hurdles on the way to receiving it." Simplicity and transparency should be made fundamental to the financial aid system. Kane proposes a simplification of the financial aid application process as a way of avoiding this problem: "...shorten the list of factors included in the need-analysis formula itself - for instance, basing expected family contributions to college education solely on family size and income." [liii]

- Bridget Terry Long, Assistant Professor at Harvard University School of Education, proposes using measurements already in place for determining financial aid. In an interview, Long illustrated this idea: "...the government already knows a great deal about who is the poor in this country, due to the welfare system and the free lunch program. It would be more sensible for these students to be automatically eligible for college financial aid."[liv]

What is the effect of financial aid on access and retention?

- In a study of low-income first year students who were recipients of Indiana's 21st Century Scholars Program, St. John et al. found that "the receipt of a student aid package had a substantial and direct influence on persistence."[lv]
- Aid was also found to equalize for access: family income variables "were no longer statistically significant (in predicting persistence) when aid packages were considered."[lvi] Loan amounts, however, were found to be negatively associated with persistence for first year students.[lvii] Black students have been found to be "more sensitive" to fluctuations in aid and tuition than white students.[lviii]

Merit vs. Need-based aid

- Since 1993, merit-based aid has significantly replaced need-based aid in more than 25% of the states. Only five "populous" states dedicate substantial funds to need-based aid.[lix] In 1998-99, the 13 states with large merit-based aid programs[lx] spent 37% more on merit-based aid compared to need-based aid expenditures.[lxi]

- In the shift to merit-based financial aid, schools end up competing for the best students, who are already more likely to have ample financial and social resources to attend the colleges of their choice. Students with less academic preparation are left without the financial support they often require to participate in postsecondary education.

- Also, often times the determinants of non-need based aid can be very alarming. The following data represents the percentage of institutions that awarded non-need institutional aid to undergraduates by institution type and criteria used to distribute grants for the 1999-2000 school year[lxii]:

Institutional Type	Race or Ethnicity	Athletics	Alumni Affiliation
4-Year Public	47%	78%	31%
4-Year Private	43%	47%	37%
2-Year Public	26%	48%	10%
2-Year Private	<1%	25%	12%
All Institutional Types	37%	53%	27%

- Given that academic achievement often—though not exclusively—correlates with income, one could argue that merit-based aid often ends up serving wealthy, high-achieving students who would have gone to college without any aid. For example, in New Mexico, which has shifted largely to merit-aid, 64% of state aid now goes to families with annual incomes of $50,000 a year and higher; 15% goes to families who earn $20,000 or less.[lxiii]
- Large state expenditures on merit scholarships generally erode funds available for need-based aid: Georgia no longer offers any need-based aid. In Louisiana, one of the poorest states in the nation, 97.5% of all state grants are non-need-based.[lxiv]
- In order for low-income students to gain access and opportunity, when looking just at state aid, states must have at minimum a balance between need-based and non-need based grants. At best, states should offer comprehensive need-based programs that give all students the opportunity for a post-secondary education and with that the opportunity for greater participation in society.
- The negative effects of merit-based aid can be seen through the example of the Hope Scholarship in Georgia. This program, funded by a state-run lottery system, waives tuition and fees at Georgia schools for graduates with GPA of 3.0 or higher. 75,000 scholarships were given out for 2000-2001. There is no income gap or requirement, however, families with incomes of less than $50,000 have to fill out FAFSA in order to be eligible, while families with incomes greater than $50,000 only have to write a one-page explanation of what their income is. Already, the negative effects are evident – the lottery basis for funding tends to fall disproportionately on low-income residents, and also many low-income families may find the FAFSA form too difficult to understand or complete. [lxv]

  The effect of the Hope Scholarship on attendance had a positive impact on mostly higher income and white students. For example, the effect of the Hope Scholarship on attendance by 18 and 19 year olds was a 3.3% decrease for blacks and a 12.2% increase for whites. Families with incomes of less than $50,000 experienced a 1.4% decrease in college attendance, while families with incomes greater than $50,000 saw a 11.4% increase.[lxvi] The only diversity factor that the

Hope Scholarship did help was geographic diversity. It also altered college choice; students post-Hope were more likely to attend a four-year than a two-year college, and also more likely to go to school in-state.

In the end, the Hope Scholarship has only served to increase the actual tuition costs of public schools (increases of 21% over four years as opposed to 8% for the rest of the US) and increase the already-wide racial gap. Before the Hope Scholarship, whites were 11% more likely than blacks to go to school, after Hope, they were 26% more likely.[lxvii]

What is "tracking" and how is it a barrier to higher education for students?

- A huge barrier to many students towards becoming prepared for college is the tracking – institutional or not – that is in place in most high schools. Recently, many schools have adopted "freedom of choice" policies in hopes of eliminating tracking from their schools
- Historically, "tracking" is the grouping of students by presumed ability or achievement into a series of courses with differentiated curriculums. There has been much research proving critical of tracking, and since then many schools have shifted to ability grouping – course-by-course placement of students as determined by perceived ability and prerequisites. However, ability grouping can become defacto tracking by continuing to support the racial, ethnic, and social-class segregation within schools.[lxviii]
- "Tracking" is clearly evident in the distribution of students in AP classes, especially math and science. This table lists the percentage of students taking particular classes by race/ethnicity between the years 1982 and 1998 (for example. 7.5% of white students took AP Calculus)[lxix]:

Race/Ethnicity	AP Calculus	AP Biology	AP Chemistry	AP Physics
White	7.5	16.7	4.8	3.0
Black	3.4	15.4	3.5	2.1
Hispanic	3.7	12.6	4.0	2.1
Asian/Pacific Islander	13.4	22.2	10.9	7.6
American Indian/Alaskan Native	0.6	6.0	0.9	0.9

It is clear from this that white and Asian/Pacific Islander students experience a much higher participation in AP students than to Black, Hispanic, or American Indian/Alaskan Native students.

- According to a study done by the *American Research Journal*, there are three key factors that prevent the success of choice-based class-grouping:
    - 1) *Institutional Barriers*: The study showed quite clearly that there were several institutional barriers that prevented low-income and minority students from joining higher-level classes. It was found that information about classes and opportunities was distributed unevenly from educators to students, educators responded selectively (ie along race/class lines) to students' requests for higher placements, and students encountered hidden prerequisites when attempting to enroll in classes. The neighborhood networks and parental involvement that gave some students access to information concerning classes was not an option for many low-income and minority students.[lxx]
    - 2) *Tracked Aspirations*: Many previously lower-track students quite simply didn't believe that they could succeed or that they belonged in the higher-track classes. When left to choose classes for themselves, many students who had been in low-track for so long chose to stay in the familiarity of the lower-track, re-segregating themselves along the same lines. Similarly, students seemed to choose classes based on an internalized sense of their social class and what they were entitled to. Some upper-track students saw their honors placement as the result of a natural progression, stating that it honors classes were "just kind of programmed in me." These students and their parents operated from powerful places in the local hierarchy to reinforce existing educational inequities and garner the best teachers and courses.[lxxi]
    - 3) *Choosing Respect*: The study also found that many students rejected high-track classes because they believed that their contributions wouldn't be valued. Some black students were apprehensive about majority-white honors courses for fear of being ostracized by black peers. For many students, entering an upper-level (and mostly white) course would require them to be willing to abandon peer group ideologies and identities that they have formed. Finally, students felt that they were sacrificing their self-respect by entering upper-level courses. Many held the belief that education should reflect their culture, knowledge, and lived experiences. They sought out "safe places" or "homeplaces" where they could explore their racial identities and strengthen their self-worth free from the white-dominated society they usually inhabit. As a result, many minority students choose to stay in lower-level classes where they felt comfortable and powerful.[lxxii]

How can these barriers be overcome?

There have been many attempts to develop programs to reduce these access barriers. Many have proven effective – in fact, according to a study, students who participated in high school outreach programs almost doubled their odds of enrolling in a four-year college. But unfortunately, these programs aren't always reaching the people they need to

reach - only 5 percent of at-risk students participated in some sort of outreach or preparation programs.[lxxiii] Three examples of outreach/preparation programs are AVID, High Schools that Work, COACH, Texas' Top Ten Percent Law, and Indiana's 21st Century Scholars Program. These programs are all in different stages of development; AVID has been established in 1,275 schools in 21 states, High Schools that Work has just begun to spread from the southern region of the US, COACH is a pilot program based out of Harvard, the Texas Ten Percent Law was recently implemented, and the 21st Century Scholars Program has been running for several years. The different techniques and strategies that these programs have used are very helpful. **For more information on these exemplary programs, please see Appendix B.**

Promoting Achievement: Remediation and Retention

Remediation

Nationwide, minority and low-income students tend to have unequal access to quality primary and secondary education and often arrive at the university's door step under - prepared. Thus, without offering remediation on college campuses, the number of historically disadvantaged students allowed to enroll at four-year institutions would be much lower than it is now. While whites make up the greatest percentage of remedial learners, other historical disadvantages such as income are a significant factor. The reason white students make up the majority of remedial students is simply because, as shown above, they have greater access to higher education than minority students in the first place.

Robert McCabe, a researcher focused on remedial education, defines the need for remediation as "deficiencies in reading, writing, and math." Other realities contributing to the need for remedial education at post-secondary institutions include: gaps between high school graduation requirements and college-level entrance requirements, as well as failed communication and collaboration between high schools and colleges in articulating and implementing these requirements. Research has established that there is not only a clear need for remediation, but that the benefits of remedial learning are great.

It is equally important to establish the importance of remedial learning as many states are cutting such programs in reaction to the recent economic downturn. At least eight states now refuse to accept any student requiring remedial learning at four-year public universities, banishing them to community colleges. In Tennessee, for example, there is a move toward banning the use of state money for any remediation, even at community colleges. In Utah, legislators are considering whether or not to charge remedial students extra for taking those classes.[lxxiv]

Why do we need remediation on college campuses?

- Percentage of students by race who graduated from high school marginally or not qualified[lxxv] for college, according to a study by the National Center for Education Statistics[lxxvi]:
    - American Indian/Alaskan Native – 55.2%
    - African-American – 53.1%
    - Hispanic – 47%
    - White – 31.9%
    - Asian – 27.3%
- 47% of high school graduates from low-income families are unprepared for college. 20% more are only minimally qualified. In contrast, among students from high-income families, only 14% leave high school unprepared for college.[lxxvii]
- In Maryland, among public high school graduates who had followed a college prep track and were enrolled at public two-year colleges:
    - 40% still required remediation in math;
    - 24% required remediation in reading;
    - and 19% required remediation in English.
    - At four-year public campuses:
    - 14% required math remediation;
    - 7% required English remediation;
    - and 6% required reading remediation.[lxxviii]

Who uses remedial learning on campus?

- A study by the NCES found in 1995 that 29% of first-time freshman enrolled in at least one remedial reading, writing, or mathematics course. [lxxix]
- Racial make-up of remedial learners[lxxx]:
    - White students—62%
    - Black students—27%
    - Hispanic students—6.6%
    - Asian—2.3%
    - American Indian—1.5%
- Remedial learners cover a wide range of characteristics and levels of intelligence, and cannot be pigeon-holed into any particular category [lxxxi]:
    - According to the American Council on Education, 18% of students in remedial classes have SAT scores above 1000 and about 5% have scores about 1200.
    - Over 80% of those developmental students are US citizens
    - Two out of three receive financial aid, one in three work 35 hours a week.
    - Their ages range from 16 to 60 years old, with almost three in five being 24 years old or younger.
- In California's community college system, half of all learners are over the age of 25 who require content-based "refresher courses" to prepare them for degree coursework.[lxxxii]

- 55% of remedial students require only one course.[lxxxiii]

Does remediation work?

Numerous studies have documented improved academic performance and degree completion rates for students who successfully complete one or two remedial courses that are comparable to, or even slightly higher, than completion rates for non-remedial students.

- Community College of Denver (CCD) students who had completed remedial courses graduated at a rate of 40%, compared to a 39% graduation rate for the entire student body.
- Anther study cites community colleges in which 24% of students enrolling in developmental education courses achieve an associate's degree at that institution, compared to a completion rate of 22% for all students.
- Students who need and take remedial courses are less likely to drop out, more likely to have higher GPAs, and more likely to complete degree requirements than students who need and do not enroll in remedial courses.[lxxxiv]
- Students who need and successfully take remedial courses are about as likely as non-remedial students to complete degree programs.[lxxxv]
- In Kentucky community colleges, 69% of students who passed remedial math courses also passed entry-level math courses, while only 53% of all students who took entry-level math passed. The difference was smaller, with 71% of remedial students passing entry-level classes and 66% of all students passing. At four-year universities, the differences were different – for math, 56% of remedial students and 55% of all students passed, and for English, only 73% of remedial students and 75% of all students passed.[lxxxvi]

What characteristics make for an effective remediation program?

According to the Benchmark Steering Team's Best Practices in Developmental Education, the following represent trademarks of effective remediation programs:

- Schools have a distinct, centralized remedial (or developmental) education department.[lxxxvii]
- Remedial education faculty collaborate with other academic departments and even conduct professional development workshops that focus on the special needs of remedial learners who are taking general for-credit courses.[lxxxviii]
- Institutions pay for continued professional development opportunities (for example workshops and conferences) for remedial education staff.[lxxxix]
- Faculty teaching remedial and for-credit courses are trained to monitor student performance in order to intervene with supplemental academic support in cases of need.[xc]
- Students enrolled in remedial courses are simultaneously enrolled in for-credit courses.[xci]
- Remedial departments regularly evaluate and mold their programs based on student feedback and performance indicators.[xcii]
- Remedial instruction incorporates a range of learning methods and is comprehensive in nature, utilizing individualized instruction and tutoring, self-instruction (for example

using computers), small-group learning, and hands-on applications of skills being cultivated in remedial courses.

• Remedial or developmental programs provide a barrage of academic support beyond remedial courses, such as academic and career counseling, pre-college orientation and skills preparation workshops, peer-support groups, professional internship opportunities and school-to-work programs that make skills and content from courses relevant to students' career aspirations.

For examples of the nation's top remediation programs, please see Appendix C.

General Remediation Policy Suggestions:

• Examine statistics and demographics on a state to state basis when making policy and funding decisions, because national statistics can distort state-by-state realities.[xciii]

• Evaluate systematically remedial program success with student and faculty feedback, and short- and long-term measures of student success (year-to-year retention rates, degree completion, career satisfaction, and other positive life outcomes). Koski and Levin found a positive relationship between student retention and "ongoing" program evaluation.[xciv]

• Track outcomes for students diagnosed "in need" of remediation who do not enroll in remedial courses in order to obtain comparative data to measure remedial-enrolled student results against.

• Facilitate the transfer process and provide scholarship/aid incentives for students who complete remedial requirements at community colleges their pursue bachelor's degrees.

• Institute mandatory assessment measures for all enrolling students to determine remedial need. Because it will equip poorly-performing students with necessary skills, such a policy will enable all students to benefit the most from the educational opportunities their universities or colleges provide.[xcv,xcvi]

• Implement an "early alert system"[xcvii] for students demonstrating struggle during their first year and mandatory, immediate intervention in the form of tutoring, advising, mentoring, and remedial placement if appropriate.

• Employ longer-term follow-up studies to measure student degree completion rates when evaluating the success of remedial programs.[xcviii]

• Combine remediation/retainment efforts with need-based grants that *increase* with each successive semester or year of enrollment.[xcix]

• Instead of eliminating non-credit (remedial) instruction at senior campuses, consider limiting the total number of not-for-credit semester units in which a student can enroll.[c]

• Allow four-year public institutions that *want* to continue providing remediation to do so, with continued state funding, if the institutions demonstrate an ability to remediate students successfully and efficiently (given that cost-to-benefit ratios must be systematized first)[ci].

• Rethink the role of community colleges in the spectrum of higher education. For example, delineate the community college specifically as a *teaching* institution and

community college faculty as *teachers* (with appropriate training and professional development opportunities).[cii]

- Consider having four-year institutions contract out remediation at two-year campuses.[ciii]
- Devote serious resources and effort to intervening with "seriously deficient" students, whose success rates are much lower than those for "deficient" students who complete remediation.[civ]
- While improving remediation, simultaneously work to eliminate its need, through outreach programs, early intervention, and secondary teacher development, communication between secondary and tertiary levels.[cv,cvi]
- If remediation is eliminated, or seriously downsized on four-year campuses those with the authority to allocate funds should accordingly increase funding to two-year colleges whose campus enrollment may swell.

Retention

What is retention?

While the numbers of students enrolling in colleges and universities is increasing, the number of students who actually graduate with a degree is much smaller. These statistics are especially disproportionate when graduation rates are compared by race, income, and socio-economic status. Minority and low-income students tend to have lower rates of retention beyond the first year as well as overall graduation rates.

In his landmark work on retention, Vincent Tinto advocates institutional retention efforts that consider degree completion a byproduct of an overall "concern for the education of students, (for) their social and intellectual growth."[cvii] Throughout his book *Leaving College: Rethinking the Causes and Cures of Student Attrition* Tinto stresses the importance of the quality of student experience on student attrition and persistence rates.

When considering the issue of retention, it is important to establish what student populations are at risk of dropout, and in which cases a student's dropout could have been prevented by the institution. As Tinto points out, "…a potentially large number of individuals will choose to depart from an institution of higher education because they have come to see that further participation in that institution no longer serves their best interests… a good many may view their leaving as quite positive forms of behavior."[cviii] In these cases, institutional retention efforts would most likely be fruitless.

Why is retention a problem?

Colleges are having problems retaining minority and low-SES (Socio-economic Status) students for a variety of reasons, including:

- academic unpreparedness (inadequate high school preparation and study habits[cix], unrealistic perceptions of college academic demands)

• economic burdens (the threat of long-term indebtedness after college, working while studying, and not sharing a similar class background with a majority of students)[cx] •
unbalanced gender demographics among students of color[cxi]
• student perceptions of being unwelcome on campus[cxii]
• lack of culturally familiar foods, activities, and (in some cases) people and language
• stereotypes associated with remedial education (prevents some needy students from seeking help, which may lead to lower success rates and higher likelihood of dropping out)
• lack of professional role models (faculty, deans, and mentors) with whom students of color identify[cxiii]
• quality of college experience[cxiv]

How can retention be increased at colleges and universities?
Tinto identifies several strategies for boosting retention, including encouraging extra-curricular involvement—which has been shown to have a positive impact on retention rates.[cxv] Work-study has also been found to impact positively on retention,[cxvi] perhaps because work-study participation connects students to sub-communities within the campus culture.[cxvii]

Belonging has been identified as a key component of students' decisions to re-enroll. For this reason, retention efforts that create tight communities and offer social support and a sense of inclusion can be effective, especially for retaining minority students, for whom a sense of welcome on campus may not be immediately (or ever) accessible.[cxviii]

Another key aspect of retention is the impact of diversity and multiculturalism on the academic performance, comfort, and overall retention of minority and non-minority students on campus. According to a study done by the Association of American Colleges and Universities, dealing with such issues through a few isolated programs is insufficient: "institutions of higher education cannot deal with diversity issues merely by providing services to remedy student deficits. Instead, the institution must change to more adequately address educational issues and organize for a more diverse future."[cxix] While many such transformational retention plans have been implemented, there is as of yet sufficient data-based evidence showing the success of such efforts to improve the campus climate for diversity. This lack of data on "what works" has two negative effects: 1) there is no base of evidence that other schools can use to build their own strategies from, and 2) with the current economic crisis the lack of substantial data threatens the funding of existing programs.[cxx]

Tinto has also established several specific traits of effective retention programs[cxxi]:
• promote active student learning
• allocate adequate resources and staff for retention efforts
• front-load retention efforts
• accurately communicate pre-admission expectations

- create learning communities in which groups of students co-enroll in a group of classes
- create monitoring and early-warning systems
- communicate institutional expectations of students

What is being done by colleges and universities to increase retention?

Following is a list of retention goal statements from various universities. *A selection of highly effective retention programs can be found in Appendix D.*

University of Texas at El Paso: "In its [strategic] plan, UTEP emphasized its commitment to creating educational opportunities rather than erecting educational barriers for students whose talents and motivations enabled them to meet the rigorous standards characteristic of university degree programs."[cxxii]

Appalachian State University: "A strong commitment to excellence in instruction, as well as to a tradition of attention to individual needs of the students."[cxxiii]

Connecticut State University: "Reshape the culture of the institution."[cxxiv]

State University of New York, College at New Paltz: "The creation of a campus environment that welcomes every aspect of human diversity and sets an expectation that everyone who works, learns, and lives on the campus has a responsibility to contribute to the development of an environment where everyone is respected."[cxxv]

Eastern Illinois University: "To provide a quality education to each student in an environment which encourages personal growth and success."[cxxvi]

Morehead State University: "To develop a network of advising and other support services designed to help students reach their academic goals."[cxxvii]

St. Cloud State University: "The goal of retention should not be retention, but rather, providing an environment that meets the individual's needs and promotes student success. The university should provide a rite of passage in which students are supported, welcomed, and assimilated into the university's academic and social life. A wide variety of experiences are valuable to students, but some of these experiences must be linked to the institution. Finally, functions and services are not an end unto themselves, but play the role of creating a proper environment for persistence."[cxxviii]

Concluding Thoughts on Retention

Student retention should occur at Universities not simply through a few isolated programs aimed at high-risk groups, but by creating an environment on campus that makes all

students feel welcome, valued, and supported. As Tinto said, "belonging" is the key to a student returning for a second year. Research seems to show that this can most effectively happen by coordinating three different levels of programs into the culture of a campus:

1) Personal attention to students' individual background, goals, and expectations.
2) The creation of small communities and mentoring system that give students a support system
3) A factor should be in place that unifies each entering class.

Each level is crucial to creating an environment that will promote retention. Students will feel as though they are valued as individuals by the school, and that they are more than just a number. They will have a small community of students with similar interests, classes, etc., which can act as a support system and create a sense of family and belonging. Finally, implementing class-wide programs gives every student something in common with each other student. Several schools listed here have programs resembling this, but only a few (such as Appalachian State) have accomplished this. In schools were there is a proportion of the population at high-risk for drop-out, special care should be taken to make sure that these students have the resources and support that they need.

Ideally, campuses should not need specific retention programs, but instead have the mechanisms in place for all students to feel welcome, supported, and valued, personally connected to and invested in their experience at a university.

In conclusion, it is important when thinking about and designing retention programs to remember that it is the diversity amongst individuals, not amongst racial, gender, or other such distinct lines, that is the most influential. Kenneth D. Richardson, Associate Professor of Psychology at Ursinus College, in a Letter to the Editor of *The Chronicle of Higher Education* critiqued the lack of attention that many programs give to this type of diversity:

> "Among other tendencies, these include a propensity for holding demographic categorizations in higher regard than the individual persons who are being categorized. In this kind of thinking, one's designation on the basis of ethnicity, culture, or gender is one's identity. Individual differences within categories drop out of the analysis, which makes any realistic dialogue or discussion about inter-group relations difficult at best… They (epistemological styles of identification) encourage stereotyping, confuse nature and nurture, and focus discourse on separateness and incompatibilities among those bearing different demographic designations."[cxxix]

APPENDIX A: University of Wisconsin's Plan 2008

While there are many schools which have specific preparation and outreach programs, and many that have remediation and retention programs in place, few schools have undergone comprehensive restructuring of their institutions in order to solve the access and achievement problem. University of Wisconsin's Plan 2008 is one such program. With a focus on increasing minority enrollment, the system-wide plan encompasses all aspects of this building block: outreach, preparation, remediation and retention.

The foundation of Plan 2008 is that it forgives the use of racial preferences in admissions in favor of outreach aimed at expanding the pool of qualified minority students. Plan 2008 leaves many of the details up to the individual campuses, and has no timeline or numerical goals/quotas. The basic philosophy of Plan 2008 is a commitment to "maintaining educational opportunities for all citizens." The proportion of Wisconsin's college-age minority population is projected to be 21.7% in 2008 (up from 12.9% in 1998), and the University wants their minority population to reflect this. Currently, the retention stats for minority students in the University of Wisconsin system is rather low – only 34% of black students graduate, as compared to 57% of white students.[cxxx] Other components of Plan 2008 include an expanded financial aid program for minority and low-income students, as well as training programs to help professors understand the learning styles of minority students.

The seven specific goals of Plan 2008 are as follows[cxxxi]:

1) Increase the number of Wisconsin High School graduates of color who apply, are accepted, and who enroll at UW System institutions. This will be accomplished by: increasing pre-college programming and funding, adult recruitment programs targeting minority adults ages 25 and up and working toward a balance of enrollment of minority students across different academic disciplines.

2) Encourage partnerships that build the educational pipeline by reaching children and their parents at an earlier age. The use of K-12 partnerships and collaboration amongst teachers, administrators and parents, targeting people of color and economically disadvantaged students through UW System outreach.

3) Close the gap in educational achievement, by bringing retention and graduation rates for students of color in line with those of the student body as a whole. They will take a 2-pronged approach toward improving retention rates:

- create organized opportunities for administrators, faculty and staff to learn about intercultural differences in communication and learning styles that can help improve learning outcomes for students of color.
- bolster campus initiatives to ensure summer employment/earnings to help meet college costs.

4) Increase the amount of financial aid available to needy students and reduce their reliance on loans. Both scholarship programs and assistantship awards will be increased and targeting students of color and economic disadvantage.

5) Increase the number of faculty, academic staff, classified staff, and administrators of color so that they are represented in the UW System workforce in proportion to their current availability in relevant job pools. In addition, work to increase their future availability as potential employees. Mentoring of graduate and professional students, recruitment of students of color from graduate schools and creation of a work-site-based English as a Second Language (ESL) program are all ways UW intends to accomplish this goal. They also plan on regularly seeking feedback from \faculty and staff on ways to improve campus climate, in addition to conducting exit surveys with those who leave the system.

6) Foster institutional environments and course development that enhance learning and a respect for racial and ethnic diversity. Ways of accomplishing this include: encouraging discussion of *Plan 2008* amongst faculty and students, accountability surveys of students to measure and report the status of campus climate and how it can be improved, increased funding for the Institute on Race and Ethnicity, and encouraging institutions to consider the use of distances learning technologies.

7) Improve accountability of the UW System and its institutions. This will be done through the Multicultural/Disadvantaged Annual Report and the annual Accountability for Achievement report.

The University of Wisconsin System has shown a great deal of success in meeting these goals[cxxxii]:

- In 2000-2001, 10,262 students participated in pre-college programs, 88% of whom were students of color.
- 2000-2001 also showed an increase of new targeted undergraduates of color enrolled of 7.7% from the previous fall. From 1991-2001, this increase was 63%.
- Bachelor degrees earned by students of color also increased by 10.6% between 1999 and 2000.
- In the category of financial aid, there was a clear preference of grants given to minority students as opposed to white students. For example, for 2000-2001, 49% of minority students' financial aid was loans, and 45% grants. For white students, those numbers were 68% and 29%, respectively.
- At the University of Wisconsin Oshkosh, the amount of financial aid being given to minority students is increasing. In 2000-2001, 249 students of color and 93 disadvantaged students received a total of $550,952 in scholarships and grants, while in 1998-1999, 232 and 69 students received $444,301.[cxxxiii]

APPENDIX B – PREPARATION AND OUTREACH PROGRAMS

AVID (Advanced Via Individual Determination)[cxxxiv]:

AVID is a class offered in high school for the students in the middle, those who don't fall in the remedial or the most talented groups. It gives students organizational, study and learning skills, providing a teacher mentor and pushing the students towards the final goal of going to college. The program began in San Diego 22 years ago, and now is in 1,275 schools in 21 states. AVID begins with time management and organizational skills – each student receives a three-ring binder where they keep notes for each class (taken in a specific format), a log of what they learn in class and all of their grades. These binders are checked and graded randomly. They are also often tutored by college students during their AVID class, and receive support, encouragement, and advice from their faculty advisor. All the while, college is the goal – Danielle Steele, an 18-year old AVID student, explains the effect the program has had on her: "Instead of working, I'll go to college and make something of my life. I haven't been in AVID a day they haven't talked about college. They push you. They make sure you're doing what you're supposed to be doing. It's just like an extra parent."

Statistics prove AVID's success:

- 95% of AVID seniors go to college, 71% of them to four-year colleges.
- 40% of AVID students take AP courses in high school.
- AVID students are well prepared for college, too – the retention rate is 80%.

Southern Regional Education Board (SREB)'s "High Schools That Work"(HSTW) program:

HSTW was initially developed in 1987 by the Southern Regional Education Boad-State Vocational Education Consortium. Since its initial 28 sites in 13 states, it has grown to 1,100 sites in 27 states. Its mission is focused around academic preparation for post-secondary education and/or a career. Targeting students who are usually not challenged to meet high academic standards, HSTW hopes to raise math, science, communication, problem-solving and technical achievement of students to above the national average and also blend traditional academics with technical and vocational studies. Outside of the classroom, HSTW also looks to advance state and local policies and leadership initiatives to sustain school improvement.[cxxxv]

HSTW accomplishes these goals through the implementation of a specific curriculum for students to complete, as well as requiring students to complete a "major," achieving some "technical literacy" in a particular area. Outside of a curriculum, HSTW encourages cooperation between teachers, hands-on learning experiences, and increased involvement of parents in their child's education.[cxxxvi]

College Opportunity and Career Help (COACH)[cxxxvii]

COACH was created by two economists, Tom Kane and Christopher Avery, at Harvard's John F. Kennedy School of Government and implemented at three Boston area high schools, including Dorchester High. The program's goal is to try and determine why low income students are less likely to go to college than their more well-off counterparts, and to find ways to overcome that discrepancy. One hour every week, for eight months, a group of six Harvard (3 male/female, five are black and one is Hispanic) graduate students (referred to as "coaches") gave 30 seniors a crash-course in the college application process, helping them on everything from picking schools to filing for financial aid. COACH targets low-income students, hoping to give them some of the college-prep advantages that their richer peers already have. As Mr. Kane says, "We weren't interested in targeting those students who were obviously college-bound. We wanted to reach those kids who had vague plans but had done nothing concrete to make their plans a reality." The program has had proven success – in the last year of the three-year study, 77% of students who participated in the program are expected to enroll in college or enter a vocational-education program (prior to COACH, 60% of the entire student body enrolled in some sort of post-secondary education).

COACH is still in a trial and testing phase, and there have been many critiques of the program so far. Many of the coaches have complained about the limits on their interactions with the high school students due to time constraints, too many students per coach, and the constricting structure of the program's research protocols. Outside critics question whether COACH is setting students up for failure, by pushing students into college who are not adequately prepared, academically and/or financially. Problems also arise with the issue of inadequate financial aid; programs such as COACH are fruitless if students cannot afford to pay tuition through graduation.

Texas and the Top Ten Percent Law[cxxxviii]

In 1996, in response to a lawsuit banning the use of race as a factor in admissions at public colleges and universities, the Texas legislature passed a law requiring those institutions to admit any graduate of a Texas high school who ranked in the top 10% of their class. While the intent of this law was to increase minority enrollment without using affirmative action, it is unclear exactly what the actual results will be.

The preliminary findings from a study of the program done by Princeton Professor Marta Tienda demonstrate that the law benefits both minority and non-minority groups. Tienda also pointed out that the proportion of minorities enrolled in the state's public universities is still far below the percentage of their total population.

The biggest diversity impact that this law has had is in regards to geographical location. The freshman class of 2000 at the University of Texas included students from 135 schools that had not been previously represented there. Increases in racial diversity have been uneven, with Asian Americans gaining the most, while the percentage of African-Americans actually decreased slightly. Also, the performance of the top-ten-percent

students in the Universities has proven to be comparable with other students who scored 200-300 points higher on their SATs.

Indiana's 21st Century Scholars Program

This program began in 1990 and has been expanded since with state funding and federal support. The program pays full in-state tuition for low-income students that meet academic and behavioral standards. "Low-income" is determined by whether a student qualifies for the federal free and reduced lunch program in the eighth grade. In addition, students must graduate from an Indiana high school with a 2.0 GPA, apply for financial aid, use no illegal drugs or alcohol, and have no criminal record. Besides paying for full tuition and fees, this program provides tutoring, mentoring, college visits, activities for parents, and other support and information services. Since 1995, when the first group graduated from high school, almost 15,000 students have received scholarships to attend college in Indiana. The program begins offering support and academic services in the ninth grade, and follows the students through graduation. Evidence has shown that these students have higher college-enrollment rates than non-scholars: In 1999, only 15.26% of 21st Century Scholars showed no evidence of enrollment in some form of higher education, as opposed to 44.26% of all Non-Scholars.[cxxxix] Overall, this program tended to have the greatest positive impact on access for low-income students.

One of the central features of this program, something that makes it very unique, is its emphasis on parent involvement and student support. For example, some of the goals for the nine "Indiana Career and Postsecondary Advancement Centers" include: Three campus visits per student by the end of junior year, one with parents, and an increase in parent participation of at least 5% each year. Collaboration with local community organizations and post secondary institutions are also important.[cxl] By attacking the preparation and outreach problem from several angles - academic, social support, and financial aid – the 21st Century Scholars Program has been successful in increasing access for all students, specifically low-income.

APPENDIX C – REMEDIATION PROGRAMS

Xavier University (Louisiana): SuperScholar/EXCEL Summer Program[cxli]

SuperScholar/EXCEL is a four-week summer program originally designed to prepare African-American students for post-secondary education. SuperScholar/EXCEL incorporates rigorous academic instruction, cultural activities, continuity of faculty-student relationships, and an emphasis on continuing education to the graduate level, in this summer program, which is attended both by high achievers and under-prepared students.

During the four weeks, students engage in content and skills learning. Areas of study are philosophy, speech and debate, and African American history. Students also practice writing and verbal and quantitative reasoning. The program also offers cultural learning activities and extra-curricular opportunities such as academic quiz bowls, motivational speakers, and recreational field trips that create a sense of community and shared learning.

The program has documented positive outcomes when comparing participants to control groups such as improved performance on ACT/SAT and GRE/LSAT exams, increased degree completion rates, and a first- to second-year retention rate of 78.2%.[cxlii]

Community College of Denver (Colorado)

Close to 60% of the student body at the Community College of Denver takes at least one remedial class;[cxliii] compared to 18% of Colorado's community college statewide student body.[cxliv] CCD students who have taken a remedial course are more likely to graduate and/or transfer to a four-year college than their classmates.[cxlv] The percentage of CCD graduates who are minorities has increased from 13% in 1986-7 to 47% in 1999-2000.[cxlvi] Among the students enrolled in CCD's Division of Education and Academic Services, 84.5% maintained a GPA of 2.00 or higher, as did 92% of students using the reading lab at least three hours a week and 97% of students using the writing lab at least three hours a week.[cxlvii]

CCD also houses all remedial/developmental education efforts within one central department, creating a coherent and organized effort that has been found to be a predictor of success in numerous studies.[cxlviii] CCD also makes it easy for students in need of academic support to seek out the help they need. The "one-stop" Academic Support Center (ASC) offers ESOL, GED, literacy, math, writing, and speech learning services along with TRIO services, in one location. CCD also offers on-line math and writing labs.

The multiple arms of the ASC converge around the shared, identified goals of facilitating faculty/student communication; enhancing student self-esteem (crucial to success), focusing instruction on students' individual needs, and creating sense of community and

connection to the college. The fact that the college has identified these goals in writing reflects a proactive campus-wide commitment to remedial education.

La Familia is another innovative CCD program. Learning communities[cxlix] are creating for entering first generation, low-income students. These learning communities establish a supportive learning environment, in which members take linked classes, are matched with peer mentors, and receive career and academic counseling. La Familia Participants enroll in their second year of study at a rate of 80%, compared to a 60% second-year return rate for all first-generation CCD students.[cl]

Another component of CCD's success has been identified as a qualified faculty dedicated to remedial education, and a commitment/embracing of diversity.[cli] An extensive peer and faculty tutoring system also ensures that any student wanting quality one-on-one assistance can get it. Tutors and mentors are complete ongoing professional training.

CCD performs a systematic evaluation of its remedial programs and responds to its findings. Orlando Griego, dean of remedial education, recognizes the college's need for better measures of success outcomes which can "defend its programs against budget cuts and to keep them from being outsourced to private entrepreneurs."[clii]

Delgado Community College (Louisiana)

Developmental education is clearly a priority of the college: around 50% of Delgado's full-time faculty in math and science, and over 60% of full-time faculty in English and communication also teach developmental courses,[cliii] allowing for "close co-ordination of educational goals.[cliv] Students enrolled in developmental courses must also take a college-level study skills course.

Brien et al. attribute Delgado's developmental education accomplishments (indicated by high rates of "student persistence and academic success"[clv]) to the integration of its developmental program with regular college programs. They also applaud an organizational structure that facilitates faculty coordination of curriculum, skills, and educational outcome goals

Like CCD, Delgado Community College seeks outside contributions to supplement insufficient state reimbursement. Louisiana will not allocate state funds to community colleges for non-credit courses.

University of Texas Austin

UT Austin boasts high remedial education success rates as well as high retention rates for at-risk student groups. Crucial components of its campus-wide efforts include a Learning Skills Center, drop-in and online tutoring, and a Study Skills Lab. Online content and skills handouts, an online writing center, and online resources for ESL students provide study resources available for free to all students, 24 hours a day.[clvi] The University's Learning Center webpage is extremely user-friendly, with helpful, accurate links to a variety of university and non-university resources.

Tex Talk is an automated telephone-tape service. Students can receive automated talks on study skills such as effective reading, writing papers, test preparation, time management, and "being assertive in class."[clvii]

UT Austin offers short Direct Instruction Programs in similar college success areas. Through the Supplemental Instruction program students can participate voluntarily in "content-based discussion sections attached to large entry-level courses."[clviii] These discussions are led by TA's and cover the course content as well as study skills. The university claims gains between 0.5 and 1.0 grade point for SI students.[clix] Students may also enroll in free non-credit classes in subjects such as GRE test prep, speed reading, and conversational English.[clx]

UT Austin also boasts a Retention Services Department that harbors numerous programs designed to retain student groups traditionally at-risk for dropping out. ACE is designed to facilitate the transition to UT Austin for first-years and transfer students. Students who chose to participate enjoy peer counseling, academic support, year-long progress checks by their advisors, and study skills workshops.[clxi] Gateway is a 2-year program for students who are identified by a committee for their academic potential. Selected students can enroll in small, for-credit classes that allow individualized assistance. Participants also have access to special support services, group activities, academic monitoring, and professional academic advising. This program incorporates effective pedagogic techniques such as collaborative learning, peer advising, and the creation of a small shared community.[clxii]

The Preview Program is a 7-week summer program created to introduce at-risk students to campus life and services. After a week-long university introduction students take six weeks of credit-classes to prepare them for the semester.

Greenville Technical College (South Carolina)

Greenville Tech has contracted out some of its remedial course instruction to Kaplan, a national for-profit education company well known for its SAT and MCAT preparatory courses. Kaplan runs short content workshops to prepare incoming students for placement tests; these workshops are voluntary. Greenville Tech covers 75% of the

workshop cost; students cover the remaining 25%. Kaplan also offers a College Success Skills workshop before the fall semester, student participation in which has lowered remedial coursework need.[clxiii]

Greenville also pays Kaplan to run remedial courses during the semester for identified students. 60% of Greenville Tech's remedial courses are now taught through Kaplan; the rest are taught by Greenville Tech faculty.[clxiv] Kaplan now offers courses all over the campus, better integrating remedial courses into campus life. Kaplan instructors are also employing using more innovative pedagogy, including an "immersion approach" to reading instruction, and "learning contracts" rather than grades outlining specific skills to master in each unit.

In 1998, more Kaplan students than non-Kaplan students earned As in lower-level reading and English courses. Among remedial math students, more Kaplan students than non-Kaplan students were found to go on to achieve passing grades in upper level math courses. 6% more Kaplan students re-enrolled from 1997 to 1998 than did non-Kaplan students.[clxv]

La Guardia Community College (New York): New Student House Program

Tinto and Riemer document the success of La Guardia's New Student House Program, which creates small learning communities for students identified as under-prepared. Participating students take four of six basic skills courses together; they may change levels as their learning needs change. The New Student House program employs group learning, class meetings, "improvisatory theatre pedagogy," a required speech course, and computer-based learning.[clxvi] The Learning Community meets together periodically with a staff member who works as both a "course facilitator and a student counselor"[clxvii] creating a link between students' academic and extracurricular experiences.

Rather than isolating remedial education students, learning communities integrate these students into the general curriculum, while creating a source of support and allowing them to earn credit at the same time they acquire the requisite skills and content to thrive in for-credit classes. Tinto and Riemer describe learning communities as "a kind of co-registration or block scheduling that enables students to take courses together. The same students register for two or more courses, forming a sort of study team."[clxviii] Sometimes a group of students will co-enroll in linked courses, for example a course in writing and a course in history, or a course in math and a course in science. Students in a learning community may also participate in discussion sections to supplement large lecture courses. Effective learning communities are often centered around a core theme linking the courses together, a technique which Tinto and Riemer suggest "provides students with a coherent interdisciplinary experience that promotes a deeper type of learning than is possible in stand alone courses."[clxix]

Tinto and Riemer found that participating La Guardia students appreciated "participation in the learning community as an important part of being able to manage the many struggles they faced in getting to and participating in class." New Student House students reported high levels of satisfaction with their college experience and persisted between years at a rate of 69.8%, compared to a 62.5% persistence rate among a comparison group.[clxx] Similar persistence rates have been reported for learning community students at Seattle Central Community College. Pass rates among New Student House students were higher than those in the comparison group *and* college-wide in four out of five examined courses, sometimes by as much as 18.3%.[clxxi] At Spokane Falls Community College, teachers reported a reduced number of Ds and Fs in science courses among learning community students.[clxxii] Other community colleges report similar positive trends in academic performance at Hunter College, Sacramento City College, and Skagit Valley College, among others.

OREGON UNIVERSITY SYSTEM (OUS)[clxxiii]

One factor contributing to a demand for remedial courses at the tertiary level is a frequent gap between high school graduation requirements and university expectations for incoming students. Proficiency-based Admissions Standards System (PASS), is OUS's "admission policy,"[clxxiv] which the university system has been working to align with state high school graduation standards, determined by student acquisition of either a Certificate of Initial Mastery (CIM) or a Certificate of Advanced Mastery (CAM). Correlating PASS and CIM/CAM standards helps school systems and teachers prepare their students accordingly for OUS admission.

Requirements for attaining a Certificate of Initial Mastery (CIM) upon high school completion now match base OUS admissions standards. When a student achieves a CIM in English, for example, she or he simultaneously meets some, but not all, PASS standards for competency in English adequate for admission. Some areas of PASS requisite proficiency must be measured through standardized tests (such as the SAT-II and AP exams) and/or PASS Teacher Verification (PTV), in which teachers determine student proficiency from portfolios of work collected throughout the academic year.

As of fall 2001, OUS hopefuls must meet PASS standards in English, math, and science. By 2005 students will be required to meet PASS standards in English, math, science, and their choice of visual and performing arts, second languages, and social science.

OUS provides incentives to high schools to tailor their curricula to PASS standards. For example OUS officially approves high school courses which comply with PASS standards through the OUS Course Approval Process. OUS has provided support to secondary school administrators, counselors and teachers in the form of orientation training for secondary school teachers and high school counselor forums. It has also issued extensive literature, detailing exact admission/PASS criteria and showing how

these criteria line up with CIM and CAM standards. OUS maintains a comprehensive, up-to-date website with information on OUS admissions policies and PASS standards.

APPENDIX D – RETENTION PROGRAMS

Indiana University – Bloomington
Undergraduate Enrollment[clxxv]:
Total full time: 27,052
Total part time: 2,331

Race/Ethnicity:
African-American: 4%
Asian-American: 3%
Hispanic: 2%
Native American: N/A
White: 87%
International: 3%

Retention/Graduation Rates:
Freshman retention rate: 88%
Four-year graduation rate: 40%
Five-year graduation rate: 61%
Average six-year graduation rate: 67%

In 1998, Indiana University received an 8 million-dollar grant from the Lily foundation to examine issues of retention and implement new programs. Since then, IU has developed several small, targeted retention efforts instead of a one-size-fits-all solution. Since 1994, freshman-sophomore year retention rates have jumped from 80% to 84%. The success of the targeted programs can be seen especially with the improvement in rates for Latino and African American students: they have jumped from 64% to 82%.[clxxvi]

Intensive Freshman Seminar (IFS)[clxxvii]: IFS is a three-week program in August that is open to all first-years. During those three weeks, students are taught by senior professors with whom they usually form valuable relationships. They live in dorms with older students and their fellow freshman. Besides academics, students are taught time management and study skills. These programs have been successful in

Freshman Interest Groups (FIGs)[clxxviii]: This 12-year-old program allows students to lie and study with other students who share their academic interests. Residence halls are comprehensive, including academic support centers and tutoring facilities that are open until 11.

Groups[clxxix]: Groups is open to all students, but focused on first-years. It offers a summer course and financial and academic support throughout the year for 300 low-income and first-generation freshman. Many students describe the people they meet and become close with through this program as being like "family."

Prairie View A&M University
Undergraduate Enrollment[clxxx]:
Total full time: 4,922
Total part time: 460

Race/Ethnicity:
African-American: 92%
Asian-American: 1%
Hispanic: 2%
Native American: N/A
White: 4%
International: 2%

Retention/Graduation Rates:
Freshman retention rate: 67%
Four-year graduation rate: 9%
Five-year graduation rate: 26%
Average six-year graduation rate: 30%

In 1998, PVAMU increased the number of math, reading, and writing courses and made tutoring, developmental lab, and academic advising mandatory. Since the implementation of these programs, retention rates have risen steadily, from 52.3% in 1998 to 68.25% in 2001.[clxxxi] Another program that has aided in retention is the Student Leadership Institute (SLI). The SLI is a program designed to help students develop their leadership, communication, conflict resolution, ethics, goal-setting, etc. skills. It is for freshman only, and the institute also emphasizes school pride and spirit, parliamentary procedure, and team building. These activities are intended to address student recruitment and retention through peer involvement.[clxxxii]

Appalachian State University
Undergraduate Enrollment[clxxxiii]:
Total full time: 11,016
Total Part time: 1,096

Race/Ethnicity:
African-American: 3%
Asian-American: 1%
Hispanic: 1%
Native American: N/A
White: 94%
International: N/A

Retention/Graduation Rates:
Freshman retention rate: 83%
Four-year graduation rate: 31%
Five-year graduation rate: 55%
Average six-year graduation rate: 62%

Freshman Learning Communities (FLC)[clxxxiv]: An FLC is a group of 15-25 students who are enrolled in one to three fall semester classes that are organized around a common theme, skill, or career direction. Because the classes are so small, it is easier for students to form study groups, discover potential career choices, and make friends with similar academic interests. Each FLC has an academic success team consisting of the course faculty member, an academic advisor, a librarian, and a peer mentor. Students who participate in Watauga College, Honors, Summer Preview, or other special programs are not eligible to join a FLC.

Freshman seminar: This is a course designed especially for first semester freshman, and is often used in conjunction with the FLC program, and is required of all students that participate in Summer Preview. The course is described as follows in the college catalog: "Designed especially for first semester freshmen, this course acquaints the student with the opportunities and demands of higher education and supports students in their transition to the University. The course involves students in the Appalachian community through a mix of activities, lectures, discussions, and participation in cultural events. In small classes, students build learning skills, practice time management and other life skills; examine the purpose and value of higher education and learn to set goals for this semester and beyond.[clxxxv]"

Summer Preview[clxxxvi]: Appalachian State offers this six-week program as a way to start college early, feel comfortable at Appalachian in the relaxed summer environment, and earn six semester hours of graded credit. Summer Preview students all live in the same dorm , participate in campus cultural programs and mountain adventure activities, and are required to take Freshman Seminar in addition to one other class.

Watauga College Freshman Program[clxxxvii]: Watauga is described by an Appalachian State website as a "unique opportunity to connect their [students] academic and intellectual life with their personal and social development" the intent of which is to create a "comprehensive learning community." Students must apply for this program, and if they are accepted they get the benefit of small courses (12-18 students) that are inter-disciplinary, integrative, and provide hands-on experience such that "your education leads to a growing insight of the world." The most unique aspect of this program is that all Watauga students live together in East Residence Hall, which also holds their classes and faculty offices. The program consists of a wide range of people from many ethnic, political, religious, and academic backgrounds.

Orientation Program[clxxxviii]: The summer before they start school, freshman come to Appalachian State for a 2-day Orientation program where they take placement tests and register for classes. This program is academically-focused, students are assigned their summer reading book and introduced to Appalachian's academic expectations. Parent orientation is held concurrently to student orientation, giving them insight to what their child might experience academically and socially in the fall. Then, in September, students participate in a second orientation exposing them to clubs, organizations, and leadership opportunities. During this time students also break into small groups and discuss the summer reading book with a faculty member.

Summer Reading Program: All incoming freshman at ASU are asked to read a book the summer before their freshman year that subsequently will be required reading in many classes. ASU has used this program since 1997. The SRP's website describes the purpose of this program: "By participating in the Summer Reading Program, students establish a common experience with other new students that will help develop a sense of community with their new environment and

introduce them to a part of the academic life they are beginning at Appalachian."[cxcix] For the Fall of 2002, freshmen are asked to read *The Things They Carried* by Tim O'Brien. In conjunction with reading the book, students are encouraged to explore "The Virtual Wall," and O'Brien will be at ASU in early September as the Fall Convocation speaker.

Evidence of Success: The retention rate for students enrolling in freshman seminars vs. those not enrolling in freshman seminars: 90% vs. 84% for 1999.[cc] For 2000, the freshman-sophomore retention rate was as follows for students participating in specific programs: Freshman Learning Communities: 87.8%, Freshman Seminar course alone: 86.4%, Watauga College Freshman Program: 85.3%. Also, five and six-year graduation rates for Freshman Seminar students typically exceed other cohorts' graduation rates (5 year rate by 2-4% points, 6 year rate by 1-3% points).[cci]

William Jewel College

Undergraduate Enrollment[cccii]*:*
Total full time: 1,116
Total part time: 37

Race/Ethnicity:
African-American: 3%
Asian-American: 1%
Hispanic: 2%
Native American: N/A
White: 92%
International: 2%

Retention/Graduation Rates:
Freshman retention rate: 76%
Four-year graduation rate: 43%
Five-year graduation rate: 55%
Average six-year graduation rate: 60%

Retention Program: "First Year Experience"

- Since 1996, William Jewel College has offered a first-year seminar course called "The Responsible Self," required of all entering students. This course offers a small class size (20), and is taught by full-time faculty from diverse disciplines and explores individualism and responsibility in various literary, historical, and cultural traditions. This course meets four times a week for an entire semester, and is structured upon discussions and various reading and writing assignments. They are asked to reflect up on the self as an individual, in relation to the community, and as a members of a team or group. Students will potentially form a strong bond by meeting these intellectual challenges as a first-year class.
- Students are introduced to the "common course" concept through an event called "Adventure Day," in which students work in their cohorts for "The Responsible Self" with faculty members on group initiatives involving physical activity. After each activity, the groups debrief what happened, reflect on how they participated as individuals, and discuss how the lessons learned here can be applied to college and the challenging academic environment that

awaits them. These activities aid in the development of a sense of trust amongst the students that helps them to engage in dialogue about sensitive issues

- Emerging Leaders Conference: First-year students with demonstrated leadership skills are invited to attend this conference, where they will build those skills and abilities and step up to leadership challenges. In addition, participants have the opportunity to become mentors the following year and all first-years are invited to apply to other experience-based leadership and service projects.
- Demonstrated success of the program: Since the early 1990s, when the FYE program began, the first-year retention rates have jumped from 72% to 85% for fall of 2001 (retention through the 3rd semester).

Community College of Denver, Denver, CO

Undergraduate Enrollment

- 2/3 of student body is low income
- 65% are first-generation college students
- 10% has a disability
- 8% use English as second language
- 58% are students of color

Student Body breakdown by Race/Ethnicity:

- African-American: 13%
- Native American: 2%
- Asian and Pacific Islander: 9%
- Hispanic: 30%
- White: 46%

- CCD Integrated Advising – a three-tiered advising model administered by the Integrated Advising committee, including basic skills assessment, general core advising, referral to support services, and policies on declaration of major and program-major advising.
- First Generation Student Success Program – Enrolls students in first-year experience classes, learning community initiatives, tutoring and peer mentor programs, service-learning opportunities and other community service. Special staff and specific faculty members work closely with students to help them adapt. This program has an annual retention rate of 80%.
- Title V H.S.I. (Hispanic Serving Institutions) Access and Success Project – This project is a five year grant to strengthen the retention and success rates of degree-seeking, low-income, first-generation and minority students within CCD's academic centers. Educational Case Management (ECM) teams work with learning community faculty to develop instructional strategies to increase the retention and success of students. Students participate in first-year-experience and pre-professional learning communities, and supplemental/enrichment activities to help ensure their success in health, math, science, and information technology disciplines. This is for all classes. In Spring 2002, after the second year of the project, 60 title V first-generation students will graduate from the college with 2-yr degrees.

University of Texas – El Paso
Undergraduate Enrollment[cxciii]:
Total full time: 9,243
Total part time: 3,712

Race/Ethnicity:
African-American: 2%
Asian-American: 1%
Hispanic: 72%
Native American: N/A
White: 12%
International: 11%

Retention/Graduation Rates:
Freshman retention rate: 67%
Four-year graduation rate: 2%
Five-year graduation rate: 13%
Average six-year graduation rate: 23%

UTEP, a largely non-residential college located in the economically disadvantaged city of El Paso, faces a unique set of challenges because it's student population is very non-traditional. Students come with high expectations and few survival skills, and over the past few years UTEP has been developing programs with the intention of creating "an environment in which they (students) would learn to succeed at being a college student."[cxciv] Their intention is to focus not just on creating an atmosphere conducive to academic success, but a climate of support that allows the whole person to thrive.

First Year Seminar[cxcv]: This course, entitled "Seminar in Critical Inquiry," is required of all freshmen, who will take it either first or second semester of their first year. Class sizes are small (20-25 students each), and are team-taught by an instructor, student peer leader, and university librarian. Hopefully, this class will encourage students' self-assessment and goal clarification and increase their involvement with UTEP activities and resources. Specific goals of the First Year Seminar include:

- Strengthen students' academic performance and ease their transition to UTEP
- Enhance students' essential academic skills
- Increase students' interaction with faculty members and each other.

This program has been very successful, as the retention rate and GPA of those who complete the seminar are higher than that of those who don't.[cxcvi]

CircLES (Circles of Learning for Entering Students)[cxcvii]: The CircLES program is designed to help incoming freshman succeed in their critical freshmen-level classes. Students are grouped into classroom "circles" of 25 people who study English, math, science or engineering together under a team of professors. Because the professors work

together, they are better able to keep track of students' progress and coordinate assignments. It also provides the opportunity for students to help each other with homework, and create an academic atmosphere of teamwork and cooperation. Students who join CircLES are more likely to graduate on time and finish college with a higher GPA than students not involved in the program. There is also a one-week mandatory orientation program for CircLES, guided by upper-class students and college faculty and staff. During this program, students are told what to look for at college, what to avoid, how to find resources and get their questions and concerns answered. Besides offering a substantial academic foundation, the orientation also provides students with a network of familiar faces to know and see on campus so they aren't as surprised or overwhelmed at the start of the school year.

Student Leadership Institute (SLI)[cxcviii]: This course-based program, consisting of no more than 75 students, prepares students for on-campus employment and leadership roles. The program offers internship-like experience, with the opportunity for employment at the end.

The Academic Center for Engineers and Scientists (ACES)[cxcix]: This center, located at the heart of the campus, is a multi-functional, state-of-the-art facility serving Science, Engineering, and Math students. ACES is a resource hub designed to serve the academic, personal, and professional growth of SEM (Science, Engineering, and Math) students. It has space for group and individual study, meetings, relaxation, workshops, etc. Often, the Center will invite speakers in from on- or off-campus for presentations and training sessions. Additionally, the Center has a vast library of resources, offers free tutoring, and gives students access to computers and other useful technology. The Center lists some specific goals on its website:

- Engage and network engineering and science majors early in their college careers
- Provide a central facility for academic advising, professional skills development, and campus networking
- Serve to provide a "safe haven" for science and engineering students to study, work, and commune, with those peers experiencing similar academic and personal challenges.

---

[i] http://chronicle.com/free/almanac/2002/nation/nation.htm

[ii] U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 2002*, NCES 2002-025, Washington, DC: U.S. Government Printing Office (2002): 99.

[iii] US Department of Education, National Center for Education Statistics, *The Condition of Education 2002*. Washington, DC: U.S. Government Printing Office, (2002): 152, 153.

[iv] Anthony Carnevale, Closing the Gap Plenary, Ed Trust Conference 11/18/02

[v] [v]Edward C. Warburton, Rosio Bugarin, and Anne-Marie Nunez, "Bridging the Gap: Academic Preparation and Post-Secondary Success of First-generation Students." Washington, DC: National Center for Education Statistics. August (2001): Table 17.

[vi] Stephen Burd. "Rift Grows Over What Keeps Low-Income Students Out of College," *Chronicle of Higher Education*. 25 January 2002.
[vii] Edmund J. Hansen, "Essential Demographics of Today's College Students." *AAHA Bulletin* 51 November (1998) www.emporia.edu/tec/t_idea8.htm.
[viii] University of Illinois Faculty Seminar. "Teaching at an Internet Distance: The Pedagogy of Online Teaching and Learning." 7 December (1999).
[ix] Thomas G. Mortenson, "Shutting the College Doors: Are We Cutting off the Middle Class?" Education Commission of the States, 2002 National Forum on Education Policy. Hollywood, CA: (2002).
[x] Anthony Carnevale, Closing the Gap Plenary, Ed Trust Conference 11/18/02
[xi] Thomas G. Mortenson, "Shutting the College Doors: Are We Cutting off the Middle Class?" Education Commission of the States, 2002 National Forum on Education Policy. Hollywood, CA: (2002).
[xii] "Poverty Rates Fell In 2000 as Unemployment Reached 31-Year Low: Upturn in Unemployment Combined with Weaknesses in Safety Net Raise Red Flags for 2001"
Center on Budget and Policy Priorities. 26 September (2001). http://www.cbpp.org/9-25-01pov.htm
[xiii] "Breaking the Social Contract: The Fiscal Crisis in Higher Education," Council for Aid to Education. (1997): 6. http://www.rand.org/publications/CAE/CAE100/index.html
[xiv] "Breaking the Social Contract: The Fiscal Crisis in Higher Education," Council for Aid to Education. (1997): 5. http://www.rand.org/publications/CAE/CAE100/index.html
[xv] L. J. Sax, A. W. Astin, W.S. Korn, and K.M. Mahoney, "The American Freshman: National Norms for Fall 1998," Higher Education Research Institute, UCLA Graduate School of Education: (1998).
[xvi] Adam Clymer, "College Students Not Drawn to Voting or Politics, Poll Shows," *New York Times* New England final ed. 12 January (2000): A14.
[xvii] "Institute Poll Shows College Students Turned Off by Politics, Turned On by Other Public Service," Panetta Institute, Cited January 2000. Access date: 28 Jun. 2002 <www.pantettainstitute.org/news.html>.
[xviii] Adam Clymer, "College Students Not Drawn to Voting or Politics, Poll Shows," *New York Times* New England final ed. 12 January (2000): A14.
[xix] U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 2002*. NCES 2002-025, Washington, DC: U.S. Government Printing Office (2002): 99.
[xx] Robert Bruce Slater, "The Progress of Black Students at the Flagship State Universities," *The Journal of Blacks in Higher Education*. 0.11 (1996): 73.
[xxi] Advisory Committee on Student Financial Assistance, *Access Denied: Restoring the Nation's Commitment to Equal Educational Opportunity*, Washington, DC. (2001): 5.
[xxii] William B. Harvey, "Minorities in Higher Education 2001-2002: Nineteenth Annual Status Report," American Council on Education (2002): 12.
[xxiii] Stephen Burd. "Rift Grows Over What Keeps Low-Income Students Out of College," *Chronicle of Higher Education*. 25 January 2002.
[xxiv] Paul E. Barton, "The Closing of the Education Frontier?" Educational Testing Service, September (2002): 12. http://www.ets.org/research/pic/frontier.pdf
[xxv] U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 2001*, Washington, DC: U.S. Government Printing Office. (2001): 6.
[xxvi] U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 2001*, Washington, DC: U.S. Government Printing Office. (2001): 99.
[xxvii]U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 2001*, Washington, DC: U.S. Government Printing Office. (2001): 99.
[xxviii] Edmund J. Hansen, "Essential Demographics of Today's College Students." *AAHA Bulletin* 51 November (1998) www.emporia.edu/tec/t_idea8.htm.
[xxix] University of Illinois Faculty Seminar. "Teaching at an Internet Distance: The Pedagogy of Online Teaching and Learning." 7 December (1999).
[xxx] Thomas G. Mortenson, "Shutting the College Doors: Are We Cutting off the Middle Class?" Education Commission of the States, 2002 National Forum on Education Policy. Hollywood, CA. (2002).

[xxxi] Lutz Berkner and Lisa Chavez, *Access to Postsecondary Education for the 1992 High School Graduates*. Washington, DC: U.S. Department of Education. National Center for Education Statistics. (1997): 17.

[xxxii] Lutz Berkner and Lisa Chavez, *Access to Postsecondary Education for the 1992 High School Graduates*. Washington, DC: U.S. Department of Education. National Center for Education Statistics. (1997): 17.

[xxxiii] *Statewide Insights: Commonwealth of Pennsylvania.* New York, NY: Standard and Poor's School Evaluation Services, (2002): 17-18. http://www.ses.standardandpoors.com/pdf/pa_swi_fullreport.pdf

[xxxiv] Susan P. Choy, *Access and Persistence: Findings from 10 years of Longitudinal Research on Students*. American Council on Education Center for Policy Analysis (2002): 15.

[xxxv] US Department of Education, National Center for Education Statistics. *Digest of Education Statistics* 2001, NCES 2000-130, by Thomas D. Snyder. Production Manager, Charlene M. Hoffman. Washington, DC: (2002): Table 142.

[xxxvi] US Department of Education, National Center for Education Statistics. *Digest of Education Statistics* 2001, NCES 2000-130, by Thomas D. Snyder. Production Manager, Charlene M. Hoffman. Washington, DC: (2002): Table 142.

[xxxvii] Susan Varga, "Paying for College: The Gold Standard", *The New York Times* 23 October (2002): 12.

[xxxviii] College Board, *Trends in College Pricing*, Washington, DC. (1999)

[xxxix] "Breaking the Social Contract: The Fiscal Crisis in Higher Education," Council for Aid to Education. (1997): 3. http://www.rand.org/publications/CAE/CAE100/index.html

[xl] "Losing Ground: A National Status Report on the Affordability of American Higher Education," *National Center for Public Policy and Higher Education*. 2002.

[xli] "Trends in Student Aid." New York: The College Board (2002): 4.

[xlii] "Trends in Student Aid." New York: The College Board (2002): 12.

[xliii] *State Student Financial Aid: Tough Choices and Trade-Offs for a New Generation.* Washington, DC: American Association of State Colleges and Universities (2000).

[xliv] Donald E. Heller, "Merit and Need-Based Aid: Recent Changes in State, Federal, and Institutional Policy and the Impact on College Affordability," Donald E. NACUBO Forum on Tuition Discounting, Dallas, 3 February (2000).

[xlv] *State Student Financial Aid: Tough Choices and Trade-Offs for a New Generation.* Washington, DC: American Association of State Colleges and Universities (2000).

[xlvi] "Trends in Student Aid." New York: The College Board (2002): 5.

[xlvii] Jennifer Wellman, "Looking Back, Going Forward: The Carnegie Commission Tuition Policy," Working Paper, January (2001): 1.

[xlviii] Susan Dynarksi, "Hope for Whom? Financial Aid for the Middle Class and its Impact on College Attendance," Working Paper 7756, National Bureau of Economic Research, June 2000, Cambridge, 16 June (2001). http://papers.nber.org/papers/W7756.pdf

[xlix] Jane Wellman, *Looking Back, Going Forward: The Carnegie Commission Tuition Policy* 4,8.

[l] Scott Stephens, "Conference Sees Roadblocks in College Path," *The Plain Dealer* 26 September 2002.

[li] Theodore Cross, "The Thernstrom Fallacy: Why Affirmative Action Is Not Responsible for High Dropout Rates of African-American College Students," *The Journal of Blacks in Higher Education*. 0.20 (1998): 98.

[lii] "Post Secondary Education Opportunity: The Environmental Scanning Research Letter of Opportunity for Postsecondary Education." September (2002): 13.

[liii] Thomas Kane. *The Price of Admission: Rethinking How Americans Pay for College*. Washington, D.C.: The Brookings Institution, 1999. 11-15.

[liv] Abigail Bucuvalas, "Who Benefits From Financial Aid?" *HGSE News* 1 October (2002).

[lv] Edward St. John et al., "Keeping the Promise: The Impact of Indiana's 21st Century Scholars Program," 23 July (2001): 13. http://www.indiana.edu/~iepc/21century.pdf

[lvi] Edward St. John et al., "Keeping the Promise: The Impact of Indiana's 21st Century Scholars Program," 23 July (2001): 13. http://www.indiana.edu/~iepc/21century.pdf

[lvii] Edward St. John et al., "Keeping the Promise: The Impact of Indiana's 21st Century Scholars Program," 23 July (2001): 14. http://www.indiana.edu/~iepc/21century.pdf

[lviii] "State of Diffusion: Defining Student Aid in an Era of Multiple Purposes," The Institute for Higher Education Policy, Aug. 1999: 9.

[lix] Jeffrey Selingo, "Questioning the Merit of Merit Scholarships," *Chronicle of Higher Education on the Web* 19 Jan. 2001. http://chronicle.com/weekly/v47/i19/19a02001.htm

[lx] Selingo, "Questioning the Merit". These states are Alaska, Arkansas, Florida, Georgia, Kentucky, Louisiana, Michigan, Mississippi, Missouri, Nevada, New Mexico, South Carolina, and Washington.

[lxi] Jeffrey Selingo, "Questioning the Merit of Merit Scholarships," *Chronicle of Higher Education on the Web* 19 Jan. 2001. http://chronicle.com/weekly/v47/i19/19a02001.htm

[lxii] "Financial Aid Professionals at Work in 1999-2000: Results from the 2001 Survey of Undergraduate Financial Aid Policies, Practices, and Procedures," Washington, DC: The College Board and The National Association of Student Financial Aid Administrators (2002): 19.

[lxiii] Selingo "Questioning the Merit." Selingo adds, from the Census Bureau, that New Mexico's median family household income in 1999 was $32,000.

[lxiv] "Table One: Total Grant Aid Awarded by State Grant Programs, 1998-99," *30th Annual NASSGAP Survey Report*, 30 July 2001: 1. http://www.nassgap.org/researchsurveys/30thsur&rep.pdf

[lxv] D.E. Heller and P. Martin (Eds.). *Who should we help? The negative social consequences of merit scholarships*. Cambridge, MA: The Civil Rights Project at Harvard University. (2002): 75,76.

[lxvi] D.E. Heller and P. Martin (Eds.). *Who should we help? The negative social consequences of merit scholarships*. Cambridge, MA: The Civil Rights Project at Harvard University. (2002): 78, 80.

[lxvii] D.E. Heller and P. Martin (Eds.). *Who should we help? The negative social consequences of merit scholarships*. Cambridge, MA: The Civil Rights Project at Harvard University. (2002):84, 85.

[lxviii] Susan Yonezawa. "Choosing Tracks: 'Freedom of Choice' in Detracking Schools," *American Educational Research Journal*. 39.1 (2002): 40-41.

[lxix] "Table 142: Percentage of public high school graduates taking selected mathematics and science courses in high school, by sex and race/ethnicity: 1982 to 1998." *Digest of Education Statistics, 2001*.

[lxx] Susan Yonezawa. "Choosing Tracks: 'Freedom of Choice' in Detracking Schools," *American Educational Research Journal*. 39.1 (2002): 46-49.

[lxxi]Susan Yonezawa. "Choosing Tracks: 'Freedom of Choice' in Detracking Schools," *American Educational Research Journal*. 39.1 (2002): 51-52.

[lxxii] Susan Yonezawa. "Choosing Tracks: 'Freedom of Choice' in Detracking Schools," *American Educational Research Journal*. 39.1 (2002): 55-59.

[lxxiii] Stephanie Desmon. "AVID puts college in sight for the in-between students," *SunSpot* 29 May (2002): 16. http://www.sunspot.net/news/local/bal-md.avid29may29,story?coll=bal-local-headlines

[lxxiv] John Cloud, "Who's Ready for College?; Conservatives want to get rid of remedial education." *Time* 14 October (2002): 60.

[lxxv] According to Supplemental Note 9 to *The Condition of Education 2000*, "marginally or not qualified" is defined as being in the lowest quartile of 4-year college students for all of the following criteria: class rank, GPA, the NELS test, and ACT or SAT scores, or were enrolled in vocational programs according to their high school transcript.

[lxxvi] "Student Effort and Academic Progress: Who is Prepared for College," *The Condition of Education 2000* Washington, DC: National Center for Education Statistics, 9 August (2000). http://nces.ed.gov/pubs2000/coe/2000/section3/s_table30_1.html

[lxxvii] Edward P. St. John et al., *State Policy and the Affordability of Public Higher Education: The Influence of State Grants on Persistence in Indiana*. Bloomington: Indiana Education Policy Center, 19 June (2001). http://www.indiana.edu/~iepc/welcome.html

[lxxviii] Ronald Phipps, *College Remediation: What It Is, What It Costs, What's at Stake*. Washington, DC: The Institution for Higher Education Policy, (1998): 8.

[lxxix] U.S. Department of Education, National Center for Education Statistics, *Remedial Education at Higher Education Institutions in Fall 1995*. U.S. Department of Education Office of Educational Research and Improvement, October (1996): iv.

[lxxx] Sara Hebel, "Georgia Strives to Raise Standards," *The Chronicle of Higher Education* April 9 (1999): A34

[lxxxi] Hunter R. Boylan, "Developmental Education: Demographics, Outcomes, and Activities," *Journal of Developmental Education* 23.2 (1999).
[lxxxii] David W. Breneman and William N. Haarlow, "Remedial Education: Costs and Consequences," *Remediation in Higher Education: A Symposium*. Washington, DC: The Fordham Foundation (1998): 13. http://www.edexcellence.net/library/remed.html
[lxxxiii] John Cloud, "Who's Ready for College?; Conservatives want to get rid of remedial education." *Time* 14 October (2002): 60.
[lxxxiv] J. Linn Allen, "Colleges Take Up Burden of Remedial Instruction," *Chicago Tribune* 26 December (2000) http://chicagotribune.com/...n/article/0,2669,SAV-0012260156,FF.html Robert H. McCabe, *No One to Waste: A Report To Public Decision-Makers and Community College Leaders*. Washington, DC: Community College Press (2000): 31-34.
[lxxxv] Robert H. McCabe, *No One to Waste: A Report To Public Decision-Makers and Community College Leaders*. Washington, DC: Community College Press (2000): 31.
[lxxxvi] Southern Regional Education Board (SREB), "Reducing Remedial Education: What Progress are States Making?" Educational Benchmarks 2000 Series (2000) pg. 17.
[lxxxvii] Benchmarking Steering Team, "Best Practices in Developmental Education," 31 May (2000), http://planet.tvi.cc.nm.us/best/
[lxxxviii] Benchmarking Steering Team, "Best Practices in Developmental Education," 31 May (2000), http://planet.tvi.cc.nm.us/best/
[lxxxix] Benchmarking Steering Team, "Best Practices in Developmental Education," 31 May (2000), http://planet.tvi.cc.nm.us/best/
[xc] Benchmarking Steering Team, "Best Practices in Developmental Education," 31 May (2000), http://planet.tvi.cc.nm.us/best/
[xci] McCabe and Day, Jr.; Benchmark Steering Team. Research has shown that simultaneous enrollment motivates remedial students who can apply the skills they are learning in remedial courses to other coursework.
[xcii] McCabe and Day, Jr. 21. McCabe and Day, Jr. identify a positive correlation between program evaluation, student retention, and student achievement in math and English.
[xciii] Anthony P. Carnevale and Richard A. Fry. "Crossing the Great Divide: Can We Achieve Equity When Generation Y Goes to College?" Washington, DC: Educational Testing Service (2000): 5.
[xciv] William S. Koski and Henry M. Levin, "Replacing Remediation with Acceleration: Preliminary Report on Literature Review and Initial Interviews" Stanford: National Center for Postsecondary Education (1998): 16.
[xcv] Robert H. McCabe, *No One to Waste: A Report To Public Decision-Makers and Community College Leaders*. Washington, DC: Community College Press (2000): 50. This suggestion is echoed in much of the literature on remediation at the post-secondary level.
[xcvi] SREB 9. The SREB reports: "As (remedial) standards are established, remedial rates rise initially—sometimes substantially. But the remedial rates decline over time. Holding all students who enter college to a single standard—even a low standard—results in higher percentages of students who need at least one remedial course."
[xcvii] Sara Hebel, "Community College of Denver Wins Fans With Ability to Tackle Touch Issues," *The Chronicle of Higher Education*, 7 May (1999): 5. http://chronicle.com/weekly/v45/i35/35a03701.htm
[xcviii] Robert H. McCabe, *No One to Waste: A Report To Public Decision-Makers and Community College Leaders*. Washington, DC: Community College Press (2000): 42.
[xcix] See the explanation of the Cal Grant system in the paper on financial aid.
[c] For example at CSU students can take no more than 30 credit hours of non-credit courses.
[ci] Albany State, for example, prides itself on its successful remediation. What options can be created for public institutions that want to continue offering remedial when the state refuses funding?
[cii] Allen Budny, "Basic Skills Problems at Community Colleges And How to Resolve Them," *Change* May/Jun. (2000): 46.
[ciii] Sara Hebel, "Georgia Strives to Raise Standards," *The Chronicle of Higher Education* 9 Apr. (1999): A34. 37 miles away, East Georgia College is the closest community college to Georgia Southern

University, too long and costly a commute for many learners. To accommodate the needs of enrolled students who do not meet basic competency requirements, East Georgia College and Georgia Southern University created a center on GSU's campus where East Georgia College faculty provide remedial education courses. Students report appreciating the convenience of the arrangement and the smaller classes.

[civ] Robert H. McCabe, *No One to Waste: A Report To Public Decision-Makers and Community College Leaders*. Washington, DC: Community College Press (2000): 38.

[cv] Numerous tactics for reducing the need for remediation are currently underway. See the paper on outreach, partnership, and retention.

[cvi] SREB 12. Maryland reports about an 11% decrease in the need for remediation at two-year colleges for students who completed a college-prep curriculum in high school.

[cvii] Vincent Tinto, *Leaving College: Rethinking the Causes and Cures of Student Attrition*, 2nd ed. Chicago: U. of Chicago Press (1993): 4.

[cviii] Vincent Tinto, *Leaving College: Rethinking the Causes and Cures of Student Attrition*, 2nd ed. Chicago: U. of Chicago Press (1993): 142.

[cix] Francine G. McNairy, *Leveling the Playing Field: Promoting Academic Success for Students of Color*, San Francisco: Jossey-Bass Inc. (1996): 6.

[cx] The impact of financial burdens on college persistence is dealt with more extensively in the paper on financial aid.

[cxi] Francine G. McNairy, *Leveling the Playing Field: Promoting Academic Success for Students of Color*, San Francisco: Jossey-Bass Inc. (1996): 7.

[cxii] Francine G. McNairy, *Leveling the Playing Field: Promoting Academic Success for Students of Color*, San Francisco: Jossey-Bass Inc. (1996): 7.

[cxiii] Francine G. McNairy, *Leveling the Playing Field: Promoting Academic Success for Students of Color*, San Francisco: Jossey-Bass Inc. (1996): 12.

[cxiv] "State Policy and the Affordability of Public Higher Education..." 14, 17. St. John et al. found that controlling for quality of college experience explained consistently lower persistence rates for African American students at an Indiana public postsecondary institution.

[cxv] Vincent Tinto, *Leaving College: Rethinking the Causes and Cures of Student Attrition*, 2nd ed. Chicago: U. of Chicago Press (1993): 178.

[cxvi] Vincent Tinto, *Leaving College: Rethinking the Causes and Cures of Student Attrition*, 2nd ed. Chicago: U. of Chicago Press (1993): 179.

[cxvii] For a more detailed discussion of financial need's impact on persistence, including a discussion of work, see the paper on financial aid.

[cxviii] Vincent Tinto, *Leaving College: Rethinking the Causes and Cures of Student Attrition*, 2nd ed. Chicago: U. of Chicago Press (1993): 185.

[cxix] Morgan Appel, "The Impact of Diversity on Students: A Preliminary Review of the Research Literature." Association of American Colleges and Universities. (1996): v.

[cxx] Morgan Appel, "The Impact of Diversity on Students: A Preliminary Review of the Research Literature." Association of American Colleges and Universities. (1996): 2.

[cxxi] Vincent Tinto, *Leaving College: Rethinking the Causes and Cures of Student Attrition*. Chicago: University of Chicago Press (1993).

[cxxii] Alfredo G. De Los Sandos, Jr., in Richardson and Skinner 1991, chapter 13. www.tamu.edu/marshome/assess/retgoals.html

[cxxiii] AASCU, 1994 www.tamu.edu/marshome/assess/retgoals.html

[cxxiv] AASCU, 1994 www.tamu.edu/marshome/assess/retgoals.html

[cxxv] AASCU, 1994 www.tamu.edu/marshome/assess/retgoals.html

[cxxvi] AASCU, 1994 www.tamu.edu/marshome/assess/retgoals.html

[cxxvii] AASCU, 1994 www.tamu.edu/marshome/assess/retgoals.html

[cxxviii] AASCU, 1994 www.tamu.edu/marshome/assess/retgoals.html

[cxxix] Kenneth D. Richardson, "Letters: Orientation Programs for Minority Students: Segregation on College Campuses," *The Chronicle of Higher Education* 2 October (1998).

[cxxx] Jeffrey Selingo, "Affirmative Action Plan for the '90s?: Wisconsin Tries for Diversity Without Numerical Goals." *The Chronicle of Higher Education* 8 May (1998): A40.
[cxxxi] "University of Wisconsin System: Plan 2008: Educational Quality Through Racial and Ethnic Diversity," US System Board of Regents, May 1998. Pg 19-25. http://www.uwsa.edu/multcult/plan/planfinl.htm.
[cxxxii] "University of Wisconsin System Minority and Disadvantaged Student Annual Report." April, 2002.
[cxxxiii] "University of Wisconsin Oshkosh Plan 2008 Biennial Report," 1998-2001. http://www.uwosh.edu/strategic/pdf/Plan2008Report.pdf
[cxxxiv] Stephanie Desmon. "AVID puts college in sight for the in-between students." *SunSpot* 29 May (2002). http://www.sunspot.net/news/local/bal-md.avid29may29,story?coll=bal-local-headlines
[cxxxv] "High Schools That Work: An evidence-based design for improving the nation's schools and raising student achievement," *Southern Regional Education Board* Atlanta: SREB (2002): 1-4. http://www.sreb.org/programs/hstw/background/2002_HSTW_Brochure.pdf
[cxxxvi] "High Schools That Work: An evidence-based design for improving the nation's schools and raising student achievement," *Southern Regional Education Board* Atlanta: SREB (2002): 5. http://www.sreb.org/programs/hstw/background/2002_HSTW_Brochure.pdf
[cxxxvii] Stephen Burd. "Bridging the Gap," *The Chronicle of Higher Education* August 9 (2002)
[cxxxviii] Rose Gutfeld, "Ten Percent in Texas: The jury is still out on an alternative to affirmative action," *Ford Foundation Report* Fall 2002.
[cxxxix] Edward P. St John, "Meeting the Access Challenge: Indiana's Twenty-first Century Scholars Program," Lumina New Agenda Series., Indiana Education Policy Center. 4.4 (2002): 17.
[cxl] Edward P. St John, "Meeting the Access Challenge: Indiana's Twenty-first Century Scholars Program," Lumina New Agenda Series., Indiana Education Policy Center. 4.4 (2002): 8.
[cxli] "SuperScholar/EXCEL," *Special Programs*, Xavier University of New Orleans, 23 June (2001) http://www.xula.edu/SS-Excel.html
[cxlii] "SuperScholar/EXCEL," *Special Programs*, Xavier University of New Orleans, 23 June (2001) http://www.xula.edu/SS-Excel.html
[cxliii] Sara Hebel, "Community College of Denver Wins Fans," *The Chronicle of Higher Education* 7 May (1999): A37.
[cxliv] "Executive Summary Chapter 7 – Remedial Education: Too much, not enough?", Colorado Department of Higher Education, 20 Jun. 2001 http://www.state.co.us/cche_dir/1289-7.html
[cxlv] Sara Hebel, "Community College of Denver Wins Fans," *The Chronicle of Higher Education* 7 May (1999): A37.
[cxlvi] Byron N. McClenney and Ruben Michael Flores, "Community College of Denver Developmental Education," *Developmental Education: A Twenty-First Century Social and Economic Imperative.* Mission Viejo: League for Innovation in the Community College (1998): 45.
[cxlvii] John E. Roueche and Suanne D. Roueche, *High Stakes, High Performance: Making Remedial Education Work*. Washington, DC, Community College Press (1999): 37.
[cxlviii] Byron N. McClenney and Ruben Michael Flores, "Community College of Denver Developmental Education," *Developmental Education: A Twenty-First Century Social and Economic Imperative*. Mission Viejo: League for Innovation in the Community College (1998): 48-9.
[cxlix] See discussion of La Guardia Community College's New Student House Program.
[cl] Sara Hebel, "Community College of Denver Wins Fans," *The Chronicle of Higher Education* 7 May (1999)
[cli] Sara Hebel, "Community College of Denver Wins Fans," *The Chronicle of Higher Education* 7 May (1999)
[clii] Sara Hebel, "Community College of Denver Wins Fans," *The Chronicle of Higher Education* 7 May (1999)
[cliii] Randy Brien, Charles A. Duffy, Madeleine Fulwiler, Pamela Andrea Neill, and Cindy Siegrist. "Delgado Community College." *Developmental Education: A Twenty-First Century Social and Economic Imperative*. League for Innovation in the Community College, The College Board. June (1998): 57.

[cliv] Randy Brien, Charles A. Duffy, Madeleine Fulwiler, Pamela Andrea Neill, and Cindy Siegrist. "Delgado Community College." *Developmental Education: A Twenty-First Century Social and Economic Imperative*. League for Innovation in the Community College, The College Board. June (1998): 55.
[clv] Randy Brien, Charles A. Duffy, Madeleine Fulwiler, Pamela Andrea Neill, and Cindy Siegrist. "Delgado Community College." *Developmental Education: A Twenty-First Century Social and Economic Imperative*. League for Innovation in the Community College, The College Board. June (1998): 55.
[clvi] *UT Learning Center*, University of Texas 11 May (2001) http://www.utexas.edu/student/utlc/
[clvii] *UT Learning Center*, University of Texas 11 May (2001) http://www.utexas.edu/student/utlc/
[clviii] "What Is Supplemental Instruction?" UT Austin Learning Center. 6 April (2001) http://146.6.156.120/si/siread.html.
[clix] "What Is Supplemental Instruction?" UT Austin Learning Center. 6 April (2001) http://146.6.156.120/si/siread.html.
[clx] *UT Learning Center*, University of Texas 11 May (2001) http://www.utexas.edu/student/utlc/
[clxi] "ACE Program: Achieving College Excellence," *Retention Programs*, U. of Texas, Austin. 1 September (1998) http://www.utexas.edu/depts/dos/ret/ace.html
[clxii] "Gateway Program," *Retention Programs*, U. of Texas, Austin 1 September (1998) http://www.utexas.edu/depts/dos/ret/gateway.html
[clxiii] Ben Gose, "Tutoring Companies Take Over Remedial Teaching at Some Colleges," *Chronicle of Higher Education*, 19 Sept. (1997): A44.
[clxiv] Ben Gose, "Tutoring Companies Take Over Remedial Teaching at Some Colleges," *Chronicle of Higher Education*, 19 Sept. (1997): A44.
[clxv] John E. Roueche and Suanne D. Roueche, *High Stakes, High Performance: Making Remedial Education Work* Washington, DC: Community College Press (1999): 39.
[clxvi] Vincent Tinto and Stacy Riemer, *Remedial Education in Higher Education: Learning Communities*, Syracuse U., Syracuse, 22 Jun. 2001 < http://soeweb.syr.edu/hed/tinto/ncpi.htm>.
[clxvii] Vincent Tinto and Stacy Riemer, *Remedial Education in Higher Education: Learning Communities*, Syracuse U., Syracuse, 22 Jun. 2001 < http://soeweb.syr.edu/hed/tinto/ncpi.htm>.
[clxviii] Vincent Tinto and Stacy Riemer, *Remedial Education in Higher Education: Learning Communities*, Syracuse U., Syracuse, 22 Jun. 2001 < http://soeweb.syr.edu/hed/tinto/ncpi.htm>.
[clxix] Vincent Tinto and Stacy Riemer, *Remedial Education in Higher Education: Learning Communities*, Syracuse U., Syracuse, 22 Jun. 2001 < http://soeweb.syr.edu/hed/tinto/ncpi.htm>.
[clxx] Vincent Tinto and Stacy Riemer, *Remedial Education in Higher Education: Learning Communities*, Syracuse U., Syracuse, 22 Jun. 2001 < http://soeweb.syr.edu/hed/tinto/ncpi.htm>.
[clxxi] Vincent Tinto and Stacy Riemer, *Remedial Education in Higher Education: Learning Communities*, Syracuse U., Syracuse, 22 Jun. 2001 < http://soeweb.syr.edu/hed/tinto/ncpi.htm>.
[clxxii] Vincent Tinto and Stacy Riemer, *Remedial Education in Higher Education: Learning Communities*, Syracuse U., Syracuse, 22 Jun. 2001 < http://soeweb.syr.edu/hed/tinto/ncpi.htm>.
[clxxiii] "PASS: Proficiency-based Admission Standards System," Oregon Univesrity System, http://www.ous.edu/pass
[clxxiv] "PASS: Proficiency-based Admissions Standards System." Oregon University System. 22 November 2002. http://www.ous.edu/pass/
[clxxv] "Education: College: Indiana University - Bloomington: Student Body," US News and World Report, http://www.usnews.com/usnews/edu/college/directory/drstudent_1809.htm
[clxxvi] Barovick, Harriet. "Colleges of the Year: Indiana University," *Time*, www.time.com/time/2001/coy/university.html
[clxxvii] Barovick, Harriet. "Colleges of the Year: Indiana University," *Time*, www.time.com/time/2001/coy/university.html
[clxxviii] Barovick, Harriet. "Colleges of the Year: Indiana University," *Time*, www.time.com/time/2001/coy/university.html
[clxxix] Barovick, Harriet. "Colleges of the Year: Indiana University," *Time*, www.time.com/time/2001/coy/university.html

BEST COPY AVAILABLE

[clxxx] "Education: College: Prairie View A&M University: Student Body," US News and World Report, http://www.usnews.com/usnews/edu/college/directory/drstudent_3630.htm
[clxxxi] "Prairie View cited for Successful Developmental Education Program" http://www.pvamu.edu/netpub/December%20Newsletter/Page%202.htm
[clxxxii] Student Leadership Institute Description http://www.pvamu.edu/gridold/studentactivities/OSAL-Office/SLI/SLIProgDesptn.html
[clxxxiii] "Education: College: Appalachian State University: Student Body," US News and World Report, http://www.usnews.com/usnews/edu/college/directory/drstudent_2906.htm
[clxxxiv] "Learning Communities at Appalachian" www.fpext.appstate.edu/gstudies/lc/details.htm
[clxxxv] "Freshman Seminar Program Description Guide" http://www.appstate.edu/www_docs/depart/freshman/cd.htm
[clxxxvi] "Summer Preview" http://www.appstate.edu/www_docs/depart/freshman/info.htm
[clxxxvii] "Freshman Seminar Program Description Guide" http://www.appstate.edu/www_docs/depart/freshman/cd.htm

[clxxxviii] "Rationale for Appalachian State," Policy Center on the First Year of College http://www.brevard.edu/fyc/instofexcellence/appalachianst/narrative.htm
[clxxxix] "About the Summer Reading Program," Appalachian State University Website. http://fpext.appstate.edu/gstudies/srp/about.htm
[cxc] Rutherford, Megan. "Master College: Appalachian State," *Time*, http://www.time.com/time/2001/coy/master.html
[cxci] "Rationale for Appalachian State," Policy Center on the First Year of College http://www.brevard.edu/fyc/instofexcellence/appalachianst/narrative.htm
[cxcii] "Education: College: William Jewell College: Student Body," US News and World Report http://www.usnews.com/usnews/edu/college/directory/drstudent_2524.htm
[cxciii] "Education: College: University of Texas-El Paso: Student Body," US News and World Report http://www.usnews.com/usnews/edu/college/directory/drstudent_3661.htm
[cxciv] "Rationale for UTEP," Policy Center on the First Year of College www.brevard.edu/fyc/instofexcellence/univoftexaselpaso/narrative.htm
[cxcv] "University Studies," University of Texas – El Paso http://dmc.utep.edu/univcoll/studies/home.htm
[cxcvi] "Rationale for UTEP," Policy Center on the First Year of College www.brevard.edu/fyc/instofexcellence/univoftexaselpaso/narrative.htm
[cxcvii] "CircLES," University of Texas – El Paso http://www.utep.edu/mie/circles/circles.htm
[cxcviii] "Rationale for UTEP," Policy Center on the First Year of College, www.brevard.edu/fyc/instofexcellence/univoftexaselpaso/narrative.htm
[cxcix] "Academic Center for Engineers and Scientists," University of Texas-El Paso www.utep.edu/sces/info.html

BEST COPY AVAILABLE

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Access and Achievement Building Block: Making the Case for All to Achieve	
Author(s): Jamie E. Scurry	
Corporate Source:	Publication Date:

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1

☒

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A

☐

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B

☐

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, please

Signature: Jamie E. Scurry	Printed Name/Position/Title: Jamie E. Scurry, Research Associate	
Organization/Address: Futures Project, Brown University, Providence, RI 02912	Telephone: 401-863-9240	FAX: 401-863-2452
	E-Mail Address: jamie_scurry@brown.edu	Date: 4/17/03

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200
Toll Free: 800-799-3742
FAX: 301-552-4700
e-mail: info@ericfac.piccard.csc.com
WWW: http://ericfacility.org

EFF-088 (Rev. 2/2003)